

**SAFETY COMPLIANCE TESTING FOR FMVSS 201U
Occupant Protection In Interior Impact
Upper Interior Head Impact Protection**

**HONDA OF AMERICA MFG. INC.
2003 Honda Accord 4-Door EX
NHTSA No. C35301**

**MGA RESEARCH CORPORATION
446 Executive Drive
Troy, Michigan 48083**



**Test Dates: December 3-4, 2002
Report Date: December 5, 2002**

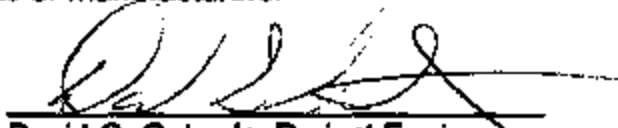
FINAL REPORT

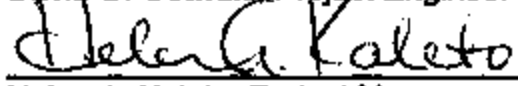
PREPARED FOR:

**U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
SAFETY ASSURANCE
OFFICE OF VEHICLE SAFETY COMPLIANCE
400 SEVENTH STREET, SW
ROOM 8111 (NSA-30)
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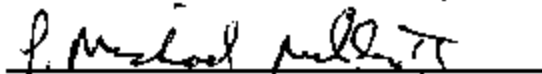
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Prepared By:


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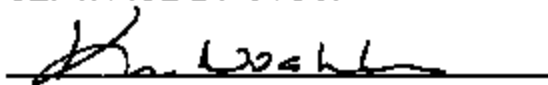


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7. Author(s) Helen A. Kaleto, Project Manager David G. Gotwals, Project Engineer		8. Performing Organization Report No. 201U-MGA-03-001	
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12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Safety Assurance Office of Vehicle Safety Compliance (NVS-220) 400 Seventh Street, SW Room 6111 Washington, DC 20590		13. Type of Report and Period Covered Final Test Report	
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15. Supplementary Notes			
16. Abstract A compliance test was conducted on the subject 2003 Honda Accord 4-Door EX, NHTSA No. C35301, in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-201U-01 for the determination of FMVSS 201U compliance. The test was conducted at the MGA Research Corporation in Madison Heights, Michigan on December 3-4, 2003. Test failures identified were as follows: NONE The data recorded seems to indicate that the 2003 Honda Accord 4-Door EX tested appears to comply with the requirements for FMVSS 201U which were set forth by the National Highway Traffic Safety Administration.			
17. Key Words Compliance Testing Safety Engineering FMVSS 201U 2003 Honda Accord 4-Door EX		18. Distribution Statement Copies of this report are available from: NHTSA Technical Reference Division, Mail Code: NPO-230 400 Seventh Street, SW, Room 5108 Washington, D.C. 20590 Telephone No. (202) 366-4946	
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TABLE OF CONTENTS

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGE NO.</u>
1.0	PURPOSE OF COMPLIANCE TEST	1-1
2.0	COMPLIANCE DATA SUMMARY	2-1
3.0	TEST DATA (Including Acceleration and Velocity Plots)	3-1
4.0	TEST EQUIPMENT LIST AND CALIBRATION INFORMATION	4-1
5.0	PHOTOGRAPHS	5-1
APPENDIX A	TEMPERATURE TRACE	A-1

LIST OF TABLES

<u>TABLE</u>	<u>DESCRIPTION</u>	<u>PAGE NO</u>
2-1	SUMMARY TABLE OF TEST RESULTS	2-2
2-2	GENERAL TEST AND VEHICLE PARAMETER DATA	2-4
2-3	HORIZONTAL IMPACT ANGLE RANGE FOR A- AND B-PILLARS	2-8
2-4	VERTICAL IMPACT ANGLE RANGES	2-9
2-5	TARGET MEASUREMENTS	2-10
2-6	SUMMARY OF TARGETING RESULTS	2-13
4-1	LIST OF ITEMS USED	4-1
4-2	FMH CALIBRATION SUMMARY	4-2

1.0 PURPOSE OF COMPLIANCE TEST

The purpose of this head impact compliance test was to determine whether the subject vehicle, a 2003 Honda Accord 4-Door EX, meets the performance requirements of FMVSS 201U, Occupant Protection In Interior Impact - Upper Interior Head Impact Protection.

Tests were conducted during December 3-4, 2002 on a 2003 Honda Accord 4-Door EX, manufactured by Honda of America Mfg. Inc. (Honda).

All tests were conducted in accordance with the U. S. Department of Transportation, National Highway Traffic Safety Administration's Laboratory Test Procedure TP-201U-01 dated April 3, 1998 and the corresponding MGA Research Corporation's FMVSS 201U procedure number MGATP201U_FRAME#2 dated October 18, 2001.

All tests were conducted at MGA Research Corporation in Madison Heights, Michigan and were performed by MGA engineers and technicians. The FMVSS 201U impactor test machine was used to conduct the testing. Target locations were determined by using a Coordinate Measurement Machine in conjunction with the MGA EZ-Target™ program and MGA procedure MGATP201U_Test Series dated 9/20/02. Per COTR instructions, only the passenger side of the vehicle was targeted and tested.

2.0 COMPLIANCE TEST DATA SUMMARY

The 2003 Honda Accord 4-Door EX was equipped with A, B, and C-Pillars, a side rail airbag system, a grab handle above each door, an adjustable seat belt anchorage on each B-Pillar, a front light and sunroof control panel, and a rear overhead light.

Upon completion of targeting the test vehicle, ten (10) targets were chosen to be impacted based upon engineering judgement and certification test data provided by Honda. Targets were chosen which appeared most likely to give high HIC(d) values. The ten (10) targets chosen were:

AP2	SR1	UR2	UR5
BP2	SR2A	UR3	
RP2	SR3B	UR4	

The 2003 Honda Accord 4-Door EX tested appears to comply with the performance criteria for FMVSS 201U. The HIC(d) measured using the Part 572L (Free Motion Headform) was below 1000 for each tested component.

TABLE 2-1
SUMMARY TABLE OF TEST RESULTS

VEH. MOD YR/MAKE/MODEL/BODY: 2003 Honda Accord 4-Door EX

VEH. NHTSA NO.: C35301 VIN: 1HGCM66523A007359 COLOR: Beige Metallic

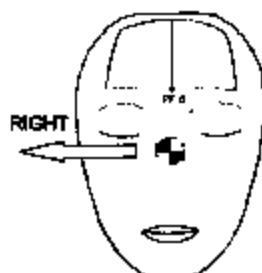
VEH. BUILD DATE: September, 2002 TEST DATES: December 3-4, 2002

TEST LABORATORY: MGA Research Corporation

OBSERVERS: Michael Smith, David Gotwals, Louis Campbell

TARGET	VEHICLE SIDE	HORIZONTAL ANGLE (deg)	VERTICAL ANGLE (deg)	VELOCITY (kph)	HIC(d)	FMH HIC	IMPACT ON FMH (mm)	
							Above	Left/Right
AP2	Right	155	50	18.9	676	675	7	3 Right
BP2	Right	90	22	23.8	719	733	9	2 Left
RP2	Right	70	23	23.9	620	601	14	1 Left
SR1	Right	90	22	18.9	260	124	52	1 Left
SR2A	Right	90	25	18.8	302	180	32	2 Left
SR3B	Right	90	36	18.7	371	271	23	0
UR2	Right	90	36	23.4	718	731	61	2 Right
UR3	Right	90	50	23.8	495	436	31	2 Left
UR4	Right	90	43	23.5	590	561	42	1 Left
UR5	Right	180	48	24.0	630	614	2	1 Right

Above and left/right refers to the position relative to reference pt. 0 where the target made contact with the Free Motion Headform. See the diagram below for details.



POST TEST COMMENTS:

The following description lists any post-test damage or other test observations for each target.
No visible damage was observed for any target during testing.

REMARKS:

The targets listed were impacted in the following order:

Right: BP2, UR2, SR2A, SR1, AP2, UR5, UR3, SR3B, RP2, UR4

The 150 mm rule was observed for targets horizontal to each other and the 200 mm rule was observed for vertical components.

RECORDED BY: David G. Gotwals

DATE: December 4, 2002

APPROVED BY: Helen A. Kaleto

TABLE 2-2
GENERAL TEST AND VEHICLE PARAMETER DATA

VEH. MOD YR/MAKE/MODEL/BODY: 2003 Honda Accord 4-Door EX

VEH. NHTSA NO.: C35301 VIN: 1HGCM66523A007359 COLOR: Beige Metallic

VEH. BUILD DATE: September, 2002 TEST DATES: December 3-4, 2002

TEST LABORATORY: MGA Research Corporation

OBSERVERS: Michael Smith, David Gotwals, Louis Campbell

INTERIOR TRIM INFORMATION: A, B, and C-Pillars, a side rail airbag system, a grab handle above each door, an adjustable seat belt anchorage on each B-Pillar, a front light and sunroof control panel, and a rear overhead light.

SUNROOF INFORMATION:

Installed: X Yes No
Operation: X Electric Manual

ROLL-BAR INFORMATION:

Installed: Yes X No
Padded: Yes No
Braces: Yes No

GENERAL INFORMATION:

Date Received: 10/28/02; Odometer Reading: 50.3 miles

DATA FROM VEHICLE'S CERTIFICATION LABEL:

Vehicle Manufactured By: Honda of America Mfg. Inc.

Date of Manufacture: September, 2002; VIN: 1HGCM66523A007359

GVWR: 1950 kg.;

GAWR FRONT: 1070 kg.

GAWR REAR: 909 kg.

DATA FROM TIRE PLACARD:

Pressure with Maximum Capacity Vehicle Load:

FRONT: 220 kpa REAR: 210 kpaRecommended Tire Size: P205/60R16

Recommended Cold Tire Pressure:

FRONT: 220 kpa REAR: 210 kpaSize of Tire on Test Vehicle: P205/60R16Type of Spare Tire: T135/90D15 ; Space Saver: X ; Standard:

VEHICLE CAPACITY DATA:

Type of Front Seats: Bench ; Bucket X ; Split Bench Number of Occupants: Front 2 ; Rear 3 ; TOTAL 5VEHICLE CAPACITY WEIGHT (VCW) = 385 kgNo. of Occupants x 68 kg = 340 kgRated Cargo/Luggage Weight (RCLW) = 45 kg (difference)

WEIGHT OF TEST VEHICLE AS DELIVERED AT LABORATORY: (with maximum fluids)

Right Front = 467.0 kg Right Rear = 280.5 kgLeft Front = 469.5 kg Left Rear = 289.0 kgTOTAL FRONT = 936.5 kg TOTAL REAR = 569.5 kg% Total Weight = 62.2 % % Total Weight = 37.8 %TOTAL DELIVERED WEIGHT = 1506.0 kg

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Delivered Weight = 1506.0 kgRated Cargo/Luggage Wt. = 45.0 kgTARGET TEST WEIGHT 1551.0 kg

WEIGHT OF TEST VEHICLE FULLY LOADED:

Right Front =	<u>465.0</u> kg	Right Rear =	<u>303.0</u> kg
Left Front =	<u>467.0</u> kg	Left Rear =	<u>310.0</u> kg
TOTAL FRONT =	<u>932.0</u> kg	TOTAL REAR =	<u>613.0</u> kg
% Total Weight =	<u>60.3</u> %	% Total Weight =	<u>39.7</u> %
TOTAL TEST WEIGHT = <u>1545.0</u> kg			
Weight of ballast secured in vehicle's cargo area = <u>43.0</u> kg			

TEST VEHICLE ATTITUDE:

AS DELIVERED: Right Front 709 mm; Left Front 708 mm;
 Right Rear 700 mm; Left Rear 699 mm;
 Pitch Angle at Right Door Sill = 0.4° rear higher
 Pitch Angle at Left Door Sill = 0.3° rear higher
 Roll Angle at Front Bumper = 0.4° right higher
 Roll Angle at Rear Bumper = 0.1° right higher

FULLY LOADED: Right Front 710 mm; Left Front 709 mm;
 Right Rear 693 mm; Left Rear 693 mm;
 Pitch Angle at Right Door Sill = 0.2° rear higher
 Pitch Angle at Left Door Sill = 0.1° rear higher
 Roll Angle at Front Bumper = 0.3° right higher
 Roll Angle at Rear Bumper = 0.2° right higher

AS TARGETED:

Pitch Angle at Right Door Sill = 0.2° rear higher
 Pitch Angle at Left Door Sill = 0.1° rear higher
 Roll Angle at Front Bumper = 0.3° right higher
 Roll Angle at Rear Bumper = 0.2° right higher

AS TESTED (Targets Impacted on Right Side):

Pitch Angle at Right Door Sill = 0.2° rear higherPitch Angle at Left Door Sill = 0.1° rear higherRoll Angle at Front Bumper = 0.3° right higherRoll Angle at Rear Bumper = 0.2° right higherVEHICLE WHEELBASE = 2740 mm

REMARKS:

RECORDED BY: David G. GotwalsDATE: December 4, 2002APPROVED BY: Helen A. Kaleto

TABLE 2-3
HORIZONTAL IMPACT ANGLE RANGE FOR A AND B PILLARS

VEH. MOD YR/MAKE/MODEL/BODY: 2003 Honda Accord 4-Door EX

VEH. NHTSA NO.: C35301 VIN: 1HGCM66523A007359 COLOR: Beige Metallic

VEH. BUILD DATE: September, 2002 TEST DATES: December 3-4, 2002

TEST LABORATORY: MGA Research Corporation

OBSERVERS: Michael Smith, David Gotwals, Louis Campbell

HORIZONTAL IMPACT ANGLE RANGE FOR A AND B PILLARS

	HORIZONTAL ANGLE SPECIFIED RANGE	MINIMUM HORIZONTAL ANGLE	MAXIMUM HORIZONTAL ANGLE
A-PILLAR	L 195°-255°	L 203.7°	L 247.3°
	R 105°-165°	R 111.6°	R 155.7°
B-PILLAR	L 195°-345°	L 201.6°	L 283.5°
	R 15°-165°	R 76.4°	R 158.3°

AS DETERMINED USING THE PROCEDURES SPECIFIED IN S8.13.4.1

REMARKS:

RECORDED BY: David G. Gotwals

DATE: December 4, 2002

APPROVED BY: Helen A. Kaleto

TABLE 2-4

VERTICAL IMPACT ANGLE RANGES

VEH. MOD YR/MAKE/MODEL/BODY: 2003 Honda Accord 4-Door EXVEH. NHTSA NO.: C35301 VIN: 1HGCM66523A007359 COLOR: Beige MetallicVEH. BUILD DATE: September, 2002 TEST DATES: December 3-4, 2002TEST LABORATORY: MGA Research CorporationOBSERVERS: Michael Smith, David Gotwals, Louis Campbell

VERTICAL IMPACT ANGLE RANGES

		VERTICAL ANGLE SPECIFIED RANGE	MINIMUM VERTICAL ANGLE	MAXIMUM VERTICAL ANGLE
FRONT HEADER	FH1	R 0°-50°	R 0°	R 50°
	FH2	R 0°-50°	R 0°	R 50°
SIDE RAIL	SR1	R 0°-50°	R 0°	R 22°
	SR2A	R 0°-50°	R 0°	R 25°
	SR2B	R 0°-50°	R 0°	R 31°
	SR3A	R 0°-50°	R 0°	R 36°
	SR3B	R 0°-50°	R 0°	R 36°
REAR HEADER	RH	R 0°-50°	R 0°	R 50°
A-PILLAR	AP1	R -5°-50°	R -5°	R 30°
	AP2	R -5°-50°	R -5°	R 50°
	AP3	R -5°-50°	R -5°	R 48°
B-PILLAR	BP1	R -10°-50°	R -10°	R 11°
	BP2*	R 0°-50°	R 0°	R 22°
	BP3	R -10°-50°	R -10°	R -3°
	BP4	R -10°-50°	R -10°	R -8°
REAR PILLAR	RP1	R -10°-50°	R -10°	R 16°
	RP2	R -10°-50°	R -10°	R 23°
UPPER ROOF 1		0°-50°	0°	50°
UPPER ROOF 2		0°-50°	0°	36°

UPPER ROOF 3	0°-50°	0°	50°
UPPER ROOF 4	0°-50°	0°	43°
UPPER ROOF 5	0°-50°	0°	48°

As determined using the Procedures specified in S8.13.4.2. BP2 is a seat belt anchor point.

RECORDED BY: David G. Gotwals

DATE: December 4, 2002

APPROVED BY: Helen A. Kalato

TABLE 2-5

TARGET MEASUREMENTS

VEH. MOD YR/MAKE/MODEL/BODY: 2003 Honda Accord 4-Door EXVEH. NHTSA NO.: C35301 VIN: 1HGCM66523A007359 COLOR: Beige MetallicVEH. BUILD DATE: September, 2002 TEST DATES: December 3-4, 2002TEST LABORATORY: MGA Research CorporationOBSERVERS: Michael Smith, David Gotwals, Loujs Campbell

Measurement	Description	Left Side	Right Side
M	Seat Fore/Aft Travel (Front seats)	—	240 mm
W° (right)	Horizontal ∠ {CG-F2 (Right Seat) to (Right A-Pillar)}	—	155.7°
A1° (right)	A1° (right) = W° (right)	—	155.7°
T° (right)	Horizontal ∠ {CG-F1 (Right Seat) to (Left A-Pillar)}	—	248.4°
A2° (right)	360° - T° (right)	—	111.6°
V° (right)	Horizontal ∠ {CG-R (Right Seat) to (Right B-Pillar)}	—	158.3°
B1° (right)	B1° (right) = V° (right)	—	158.3°
U° (right)	Horizontal ∠ {CG-F2 (Right Seat) to (Right B-Pillar)}	—	78.4°
B2° (right)	B2° (right) = U° (right)	—	78.4°
J	A-Pillar {(Plane 3) - (Plane 5)}	N/A	333.7 mm
J/2	J + 2	N/A	166.9 mm
D1	Upper Roof {(Plane A) - (Plane B)}	1676.8 mm	
D1/2	D1 + 2	838.3 mm	
D2	Upper Roof {(Plane C) - (Plane D)}	1177.3 mm	
D2/2	D2 + 2	588.7 mm	
.35D1	.35 x D1	586.8 mm	
.35D2	.35 x D2	412.1 mm	
N	B-Pillar {(BPR) - (lowest point on daylight opening forward of B-Pillar)}	N/A	422.4 mm
N/2	B-Pillar {(BP3) - (lowest point on daylight opening forward of B-Pillar)}	N/A	211.2 mm
N/4	B-Pillar {(BP4) - (lowest point on daylight opening forward of B-Pillar)}	N/A	105.6 mm
D	{(Corner of Roof Area, point 7) - (roof area center, point M)}	N/A	720 mm
3D/7	(3 x D) + 7	N/A	309 mm

s determined using the Procedures specified in S10.1-10.13.

SgRP Locations (vehicle coordinates)

	Left (mm)			Right (mm)		
	x	y	z	x	y	z
Front	2044.0	-336.0	733.0	2039.0	336.0	743.0
Rear 2nd Row	2899.0	-336.0	743.0	2899.0	336.0	743.0

SgRP Locations (world coordinates)

	Left (mm)			Right (mm)		
	x	y	z	x	y	z
Front	2044.0	-336.7	732.7	2039.1	335.3	742.9
Rear 2nd Row	2898.7	-337.8	742.4	2898.7	334.2	742.6

CG Locations (world coordinates)

	Left (mm)			Right (mm)		
	x	y	z	x	y	z
CGF1	1964.0	-336.7	1392.7	1959.1	335.3	1402.9
CGF2	2204.0	-336.7	1392.7	2199.1	335.3	1402.9
CGR 2nd Row	3058.7	-337.8	1402.4	3058.7	334.2	1402.6

REFERENCE FOR VEHICLE COORDINATE SYSTEM:

Driver side outboard front seat anchor (x, y, z) = (1713.0, -558.0, 520)

REMARKS:

RECORDED BY: David G. Gotwals

DATE: December 4, 2002

APPROVED BY: Helen A. Kaleta

TABLE 2-6

SUMMARY OF TARGETING RESULTS

VEH. MOD YR/MAKE/MODEL/BODY: 2003 Honda Accord 4-Door EXVEH. NHTSA NO.: C35301 VIN: 1HGCM88523A007359 COLOR: Beige MetallicVEH. BUILD DATE: September, 2002 TEST DATES: December 3-4, 2002TEST LABORATORY: MGA Research CorporationOBSERVERS: Michael Smith, David Gotwals, Louis Campbell

SUMMARY OF TARGETING RESULTS								
Target	Location (mm)			Horizontal Angle (deg)	Vertical Angle (deg)	Relocation (Yes/No)	Extension (# of 25 mm Spheres)	Impact (Yes/No)
	x	y	z					
A-Pillar Right Side								
AP1	1776.7	526.0	1532.0			Yes		
REL	1788.9	535.3	1508.4	148	30		1	No
AP2	1685.5	582.2	1444.8	155	50	No		Yes
AP3	1622.2	621.9	1364.7	155	48	No		No
B-Pillar Right Side								
BP1	2315.1	477.9	1587.8	90	11	No		No
BP2	2290.9	602.5	1330.2	90	22	No		Yes
BP3	2267.1	620.9	1377.4	79	-3	No		No
BP4	2334.0	673.9	1271.6	140	-8	No		No
Rear Pillar Right Side								
RP1	3167.5	496.9	1561.9	78	18	No		No
RP2	3148.1	618.9	1411.9	70	23	No		Yes
Front Header Right Side								
FH1	1698.1	407.1	1545.5	180	50	No		No
FH2	1683.3	256.5	1549.5	180	50	No		No
Side Rail Right Side								
SR1	1926.4	502.6	1556.1			Yes		
REL	1911.4	491.9	1549.4	90	22		1	Yes
SR2(A)	2076.2	502.2	1597.5			Yes		
REL	2060.2	520.7	1553.8	90	26		2	Yes

SUMMARY OF TARGETING RESULTS								
Target	Location (mm)			Horizontal Angle (deg)	Vertical Angle (deg)	Relocation (Yes/No)	Extension (# of 25 mm Spheres)	Impact (Yes/No)
	x	y	z					
SR2(B)	2014.7	503.1	1593.4			Yes		
REL	2020.5	523.6	1545.3	90	31		2	No
SR3A	2671.6	499.6	1664.1	90	36	No		No
SR3B	2842.0	502.7	1546.1	90	36	No		Yes
Rear Header Right Side								
RH	3153.9	334.4	1592.9	0	50	No		No
Upper Roof Right Side								
UR1	2019.1	410.5	1586.2	90	50	No		No
UR2	2315.5	409.4	1593.6	90	36	No		Yes
UR3	2532.8	406.3	1587.9	90	50	No		Yes
UR4	3015.8	411.3	1595.0	90	43	No		Yes
UR5	1917.0	14.5	1578.3	180	48	No		Yes

As determined using the Procedures specified in S10.1-10.13.

REMARKS: The horizontal and vertical approach angles listed in this table are the impact angles judged by the test engineer most likely to give high HIC(d) values.

The following targets were found to be located within the side rail airbag zone:

AP1	BP1	SR2A	SR3B
AP2	RP1	SR2B	
AP3	SR1	SR3A	

These targets qualify for reduced velocity testing.

RECORDED BY: David G. Gotwals

DATE: December 4, 2002

APPROVED BY: Helen A. Kalato

MCA RESEARCH CORP
CIVIL ENGINEERING
2003 HONDA ACCORD
4 DOOR SEDAN

C1570J

12/4/92

TEST #5
(FM2379)

RIGHT AP2
D/Y = 155/50

PRE-TEST

MICROSEARCH CORP	
ELECTRONIC TESTING	
2000 HICKORY AVE	
FARMERSBURGH, NY	
11731	124/01
TEST #5	12021 482
451274	124/50
POST-TEST	

**MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN**

C35301

12/4/02

**TEST #5
(FM2379)**

**RIGHT AP2
H/V = 155/50**

POST-TEST

MICHIGAN OPERATIONS
DATE: 10/18/01
SUPERCEDES: MGATP201U_FRAME #2.3

DOC. NO.: MGATP201U_FRAME #2
REVISION NO.: 4
PAGE 9 of 9

SUMMARY OF FMVSS 201U TEST

JOB/NHTSA NO: C35301 VEHICLE YR/MAKE/MODEL: 2003 Honda Accord

GENERAL TEST PARAMETERS:

Test Number: 5

Target (Vehicle Side): left/right APZ

Temperature: 72 °C

MGA Test Reference No.: FM2379

Humidity: 82 %

Approach Angles: Horizontal 155 °

Time of Test: 8:56 am/pm

Vertical 50 °

FMH Serial No: 3

TEST RESULTS:

HIC(d)	HIC	Δt (msec)	Velocity (kph)	Impact location on FMH (mm)	
				Above Pt. O	Left/Right Pt. O
676	675	4.8	18.9	7	3

INSTRUMENTATION INFORMATION: (all accelerometers are Endevco 7264-2000)

Axis	Channel	Serial No.	DLR Value	ΔV Pre-Test	ΔV Post-Test
X	5	J35923	-100.9	1.21	1.21
Y	6	J35916	100.7	1.23	1.23
Z	7	J35913	112.2	1.51	1.51

REMARKS (Summary of test, damage, non-compliance, invalid test, etc.):

NO VISUAL DAMAGE

Recorded By: [Signature] Approved By*: [Signature] Date: 12/4/02

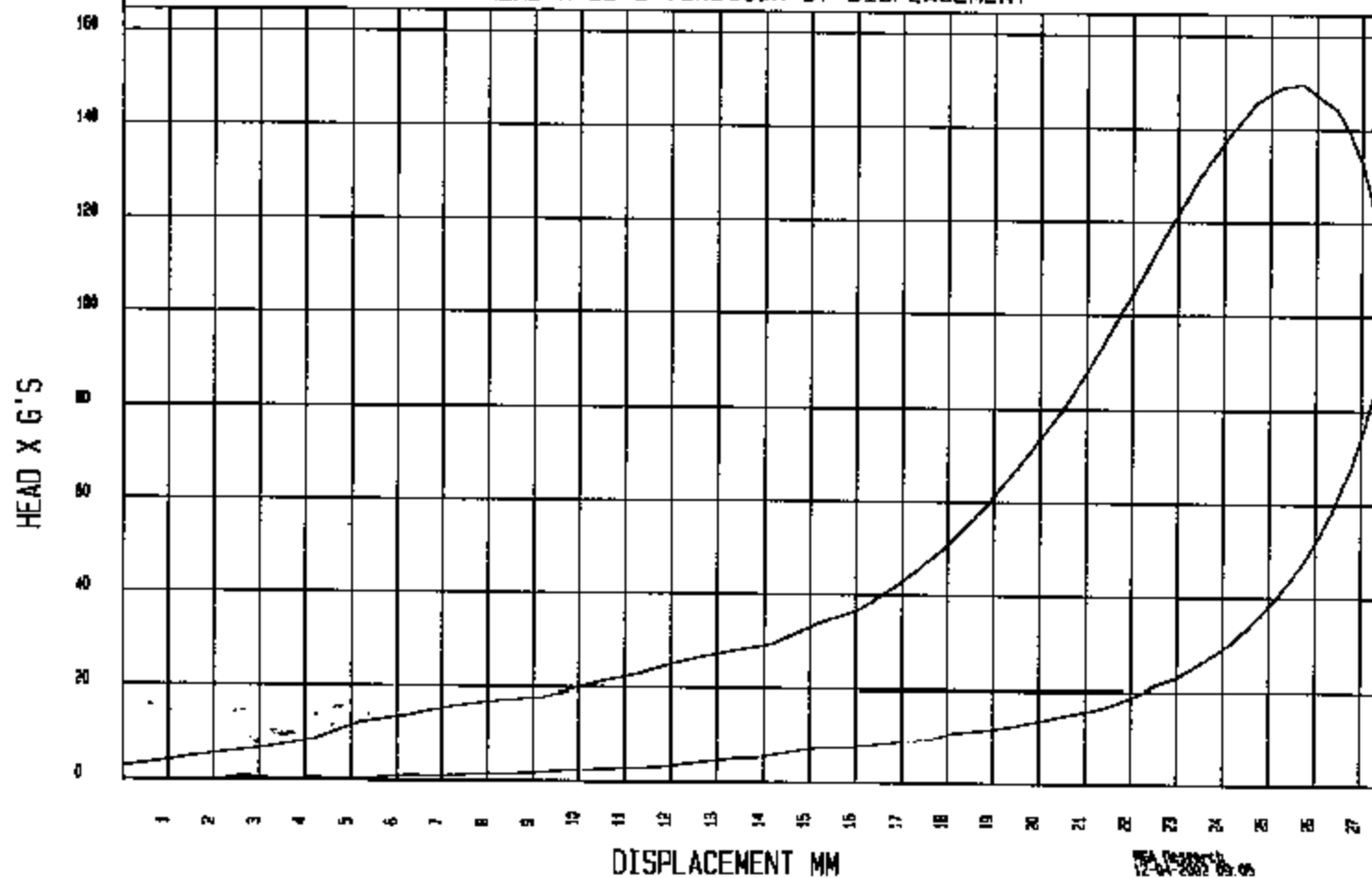
*Only necessary for NHTSA (Government) Compliance testing.

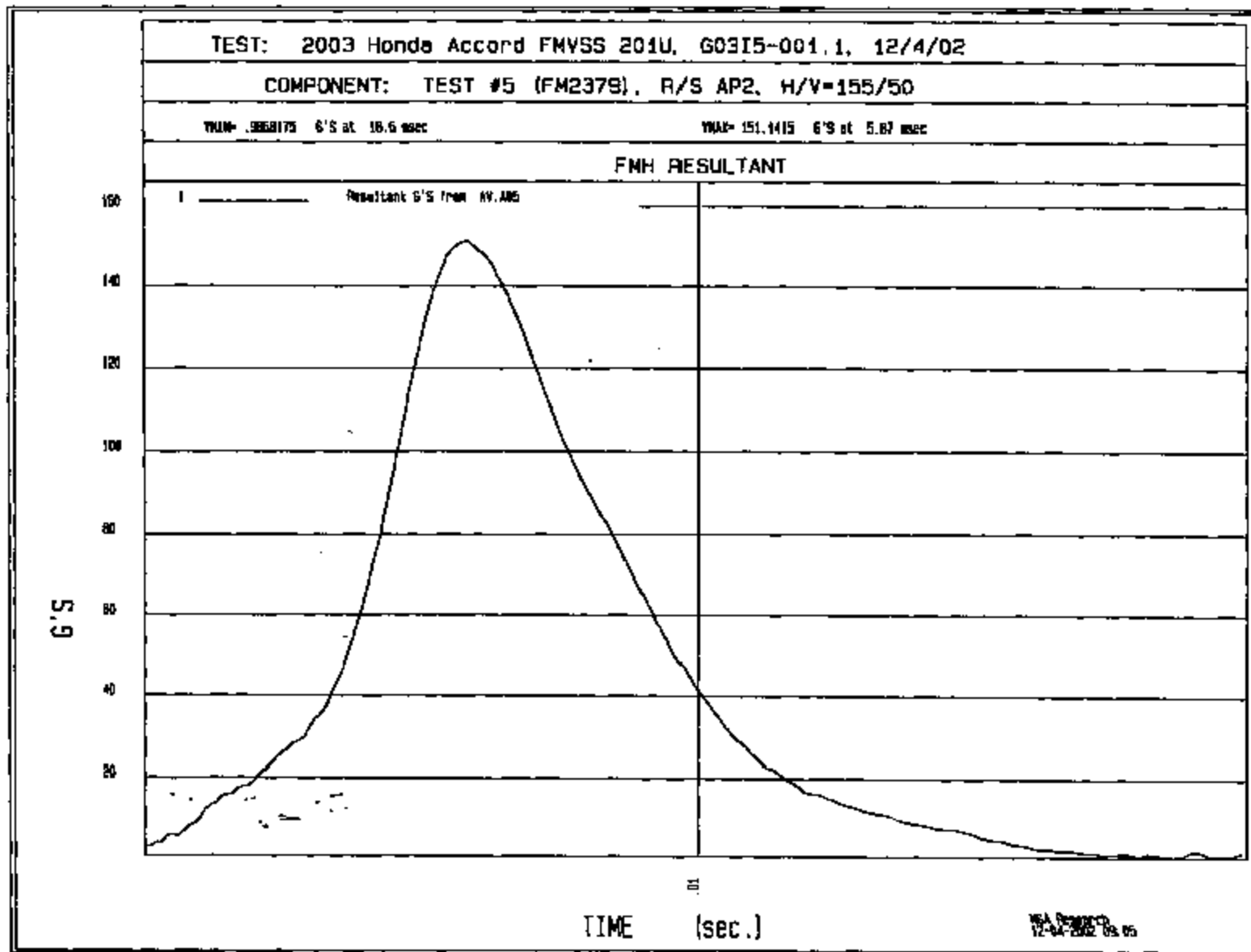

```
*****
RESULTS OF HIC36 PROGRAM
*****
The input file is \NHTSA\FM2379AV.A05
HIC = 675.18 calculated over 4.8 msec
T1 = 3.98 msec T2 = 8.76 msec
*****
HIC = 676
Impact Velocity = 18.9 (kph)
```

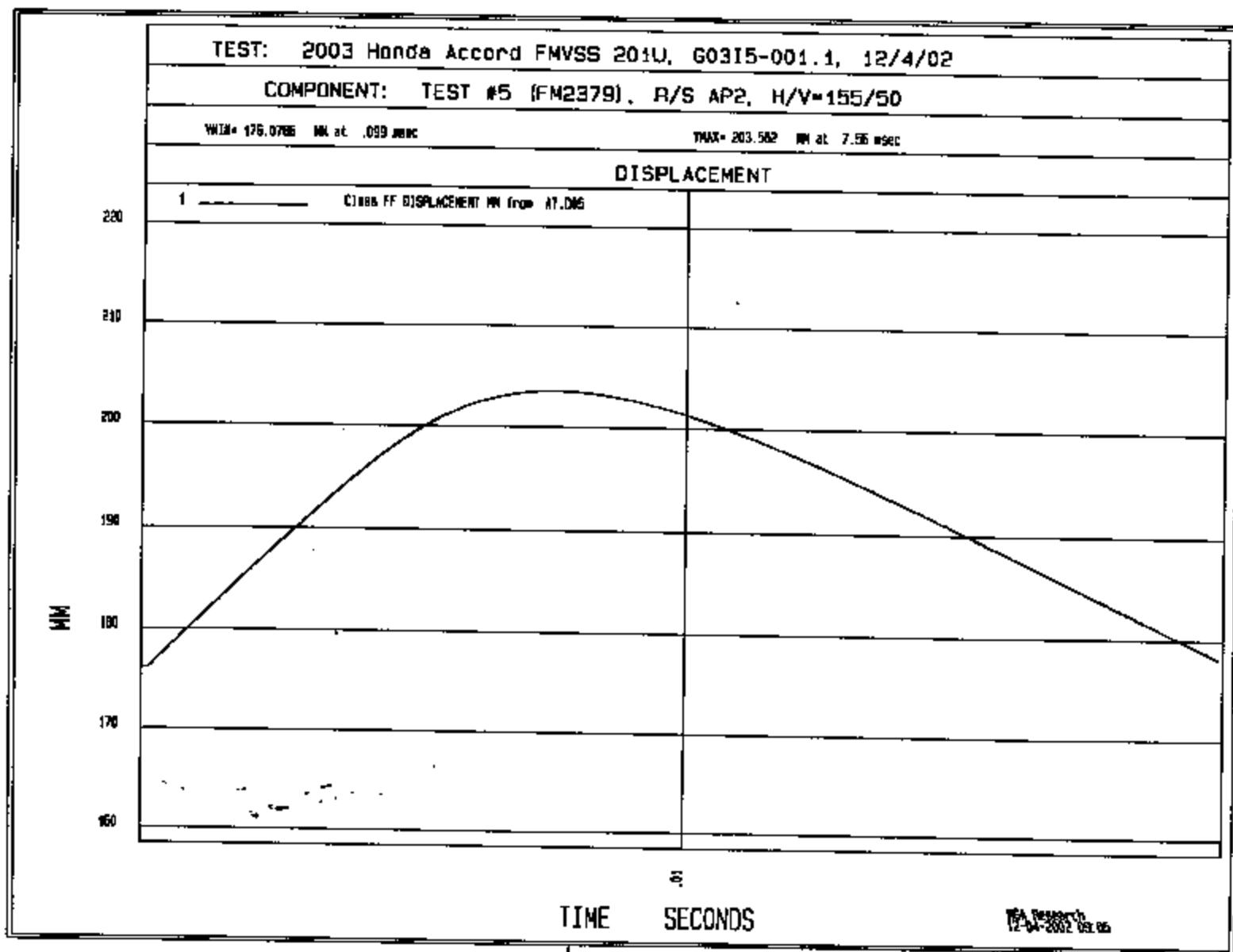
TEST: 2003 Honda Accord FNVSS 2010, G03I5-001.1, 12/4/02

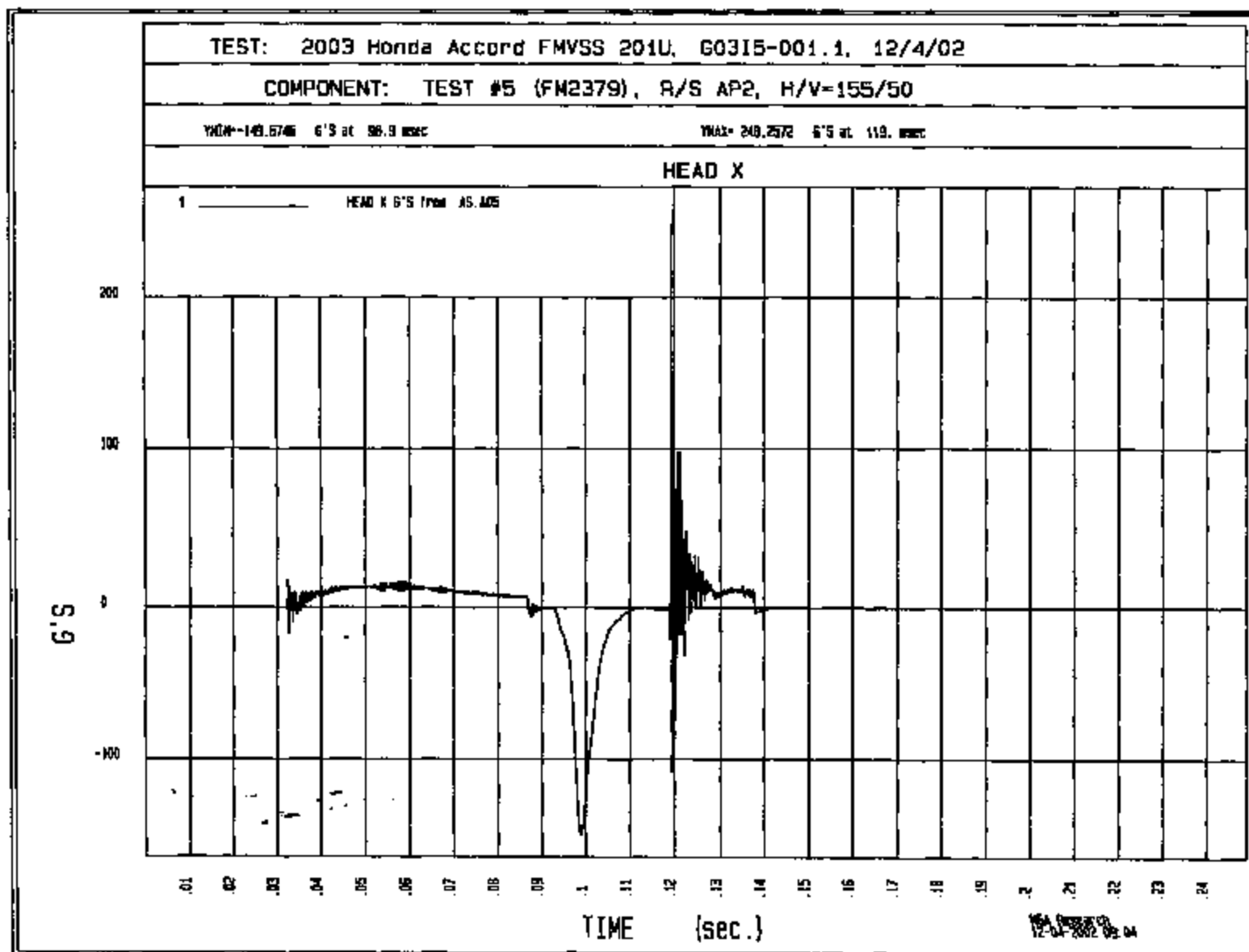
COMPONENT: TEST #5 (FM2379), R/S AP2, H/V=155/50

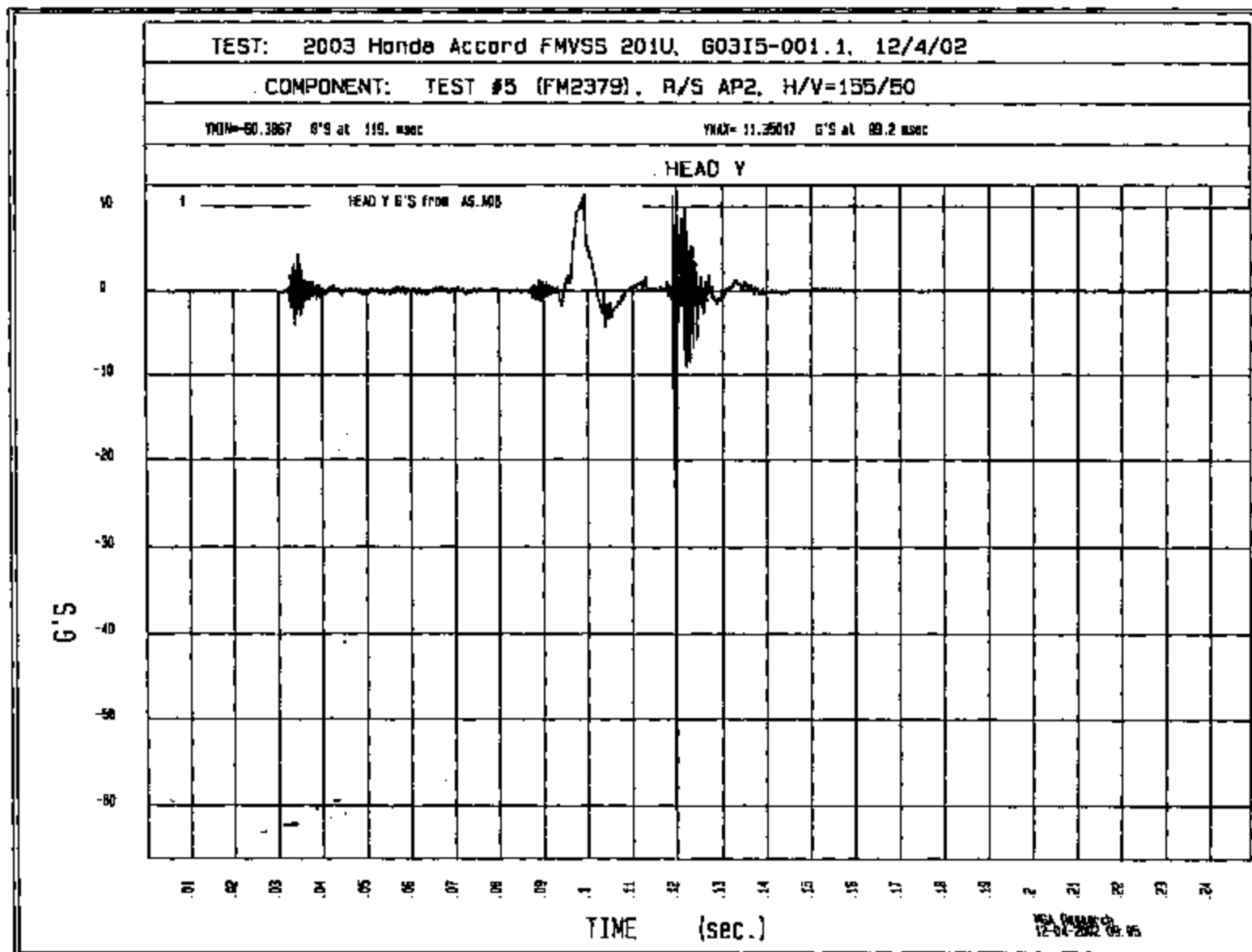
HEAD X as a function of DISPLACEMENT

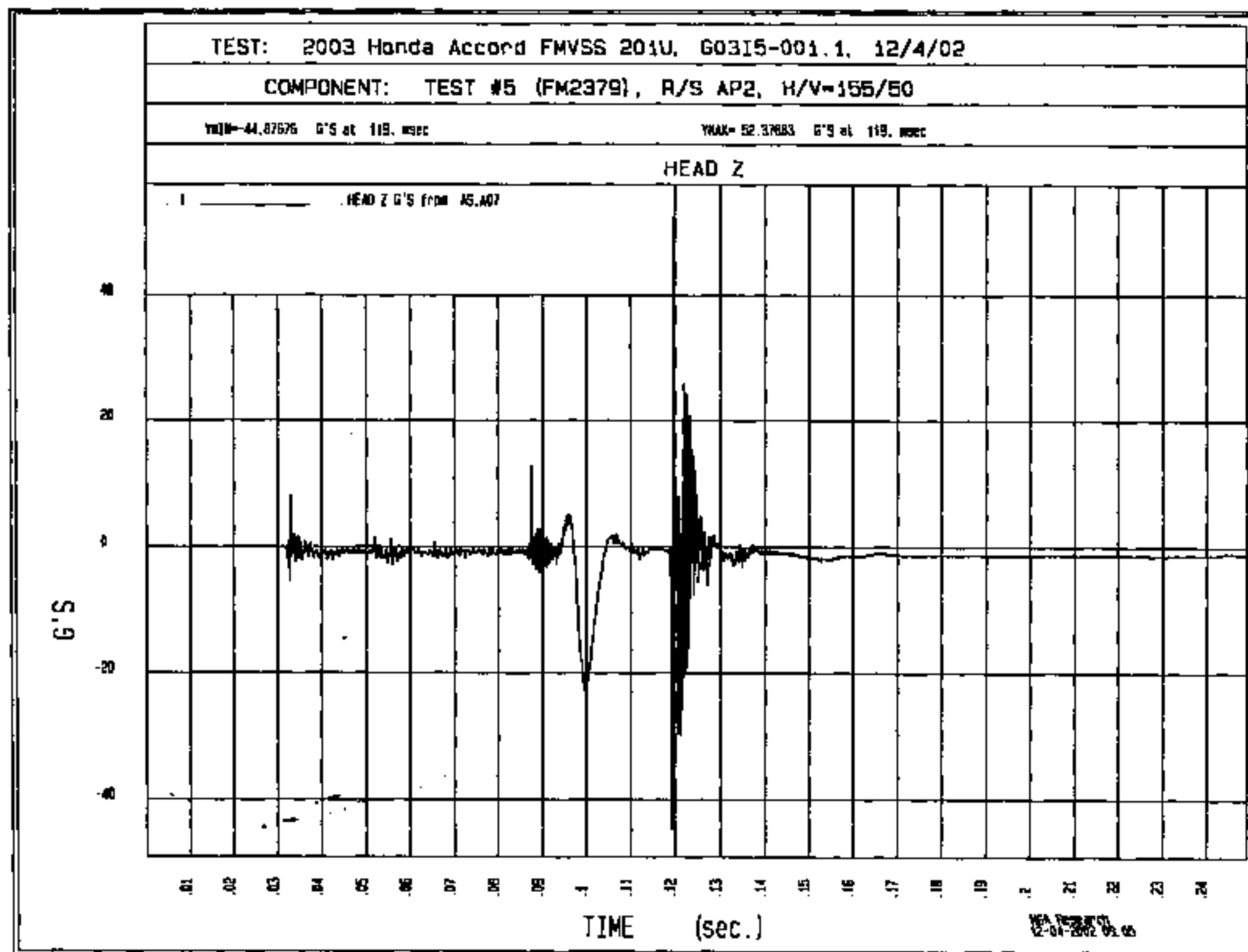












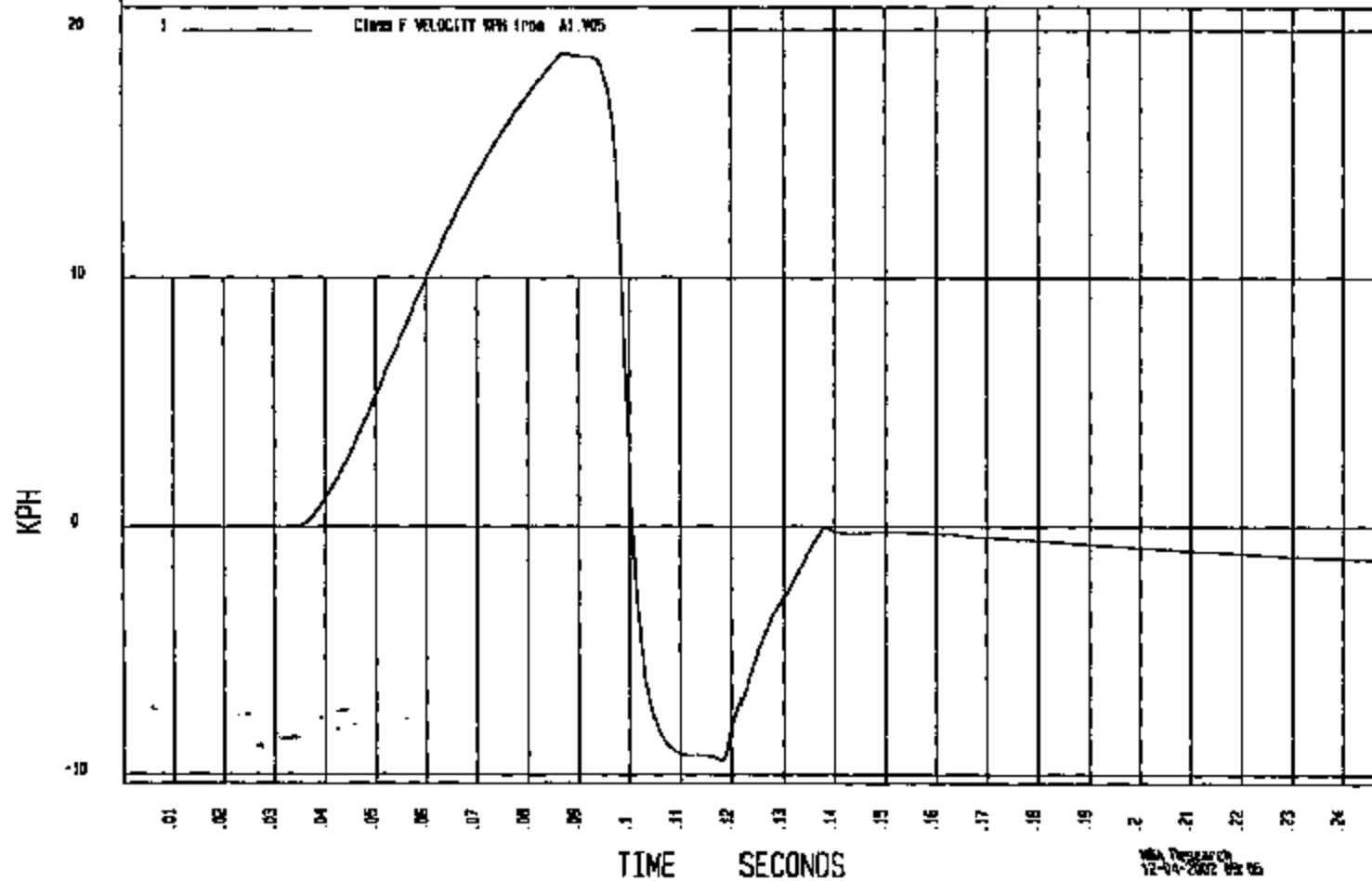
TEST: 2003 Honda Accord FNVSS 2010, 60315-001.1, 12/4/02

COMPONENT: TEST #5 (FM2379), R/S AP2, H/V=155/50

YMIN=-9.42363 KPH at 110. msec

YMAX=19.01848 KPH at 87.1 msec

VELOCITY



MCA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

12/3/02

TEST #1
(FM2375)

RIGHT BP2
H/V - 90/22

PRE-TEST

MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

CM3301

12/3/02

TEST #1
(FM2375)

RIGHT BP2
H/V = 90/22

POST-TEST

**MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN**

C35301

12/3/02

**TEST #1
(FM2375)**

**RIGHT BP2
H/V = 90/22**

POST-TEST

MICHIGAN OPERATIONS
DATE: 10/18/01
SUPERCEDES: MGATP201U_FRAME #23

DOC. NO.: MGATP201U_FRAME #2
REVISION NO.: 4
PAGE 9 of 9

SUMMARY OF FMVSS 201U TEST

JOB/NHTSA NO: C35371 VEHICLE YR/MAKE/MODEL: 2003 Honda Accord

GENERAL TEST PARAMETERS:

Test Number: 1

Target (Vehicle Side): left/right BP2

Temperature: 73 °F/°C

MGA Test Reference No.: FM2375

Humidity: 20 %

Approach Angles: Horizontal 90 °

Time of Test 1:56 am/pm

Vertical 22 °

FMH Serial No: 35

TEST RESULTS:

HIC(d)	HIC	Δt (msec)	Velocity (kph)	Impact location on FMH (mm)	
				Above Pt. O	Left/Right Pt. O
719	733	6.8	23.8	9	2

INSTRUMENTATION INFORMATION: (all accelerometers are Endevco 7264-2000)

Axis	Channel	Serial No.	DLR Value	ΔV Pre-Test	ΔV Post-Test
X	5	J35924	- 45.1	1.20	1.21
Y	6	J35519	45.3	1.23	1.23
Z	7	J31231	45.1	1.51	1.51

REMARKS (Summary of test, damage, non-compliance, invalid test, etc.):

NO VISIBLE DAMAGE

Recorded By: [Signature] Approved By*: [Signature] Date: 12/3/02

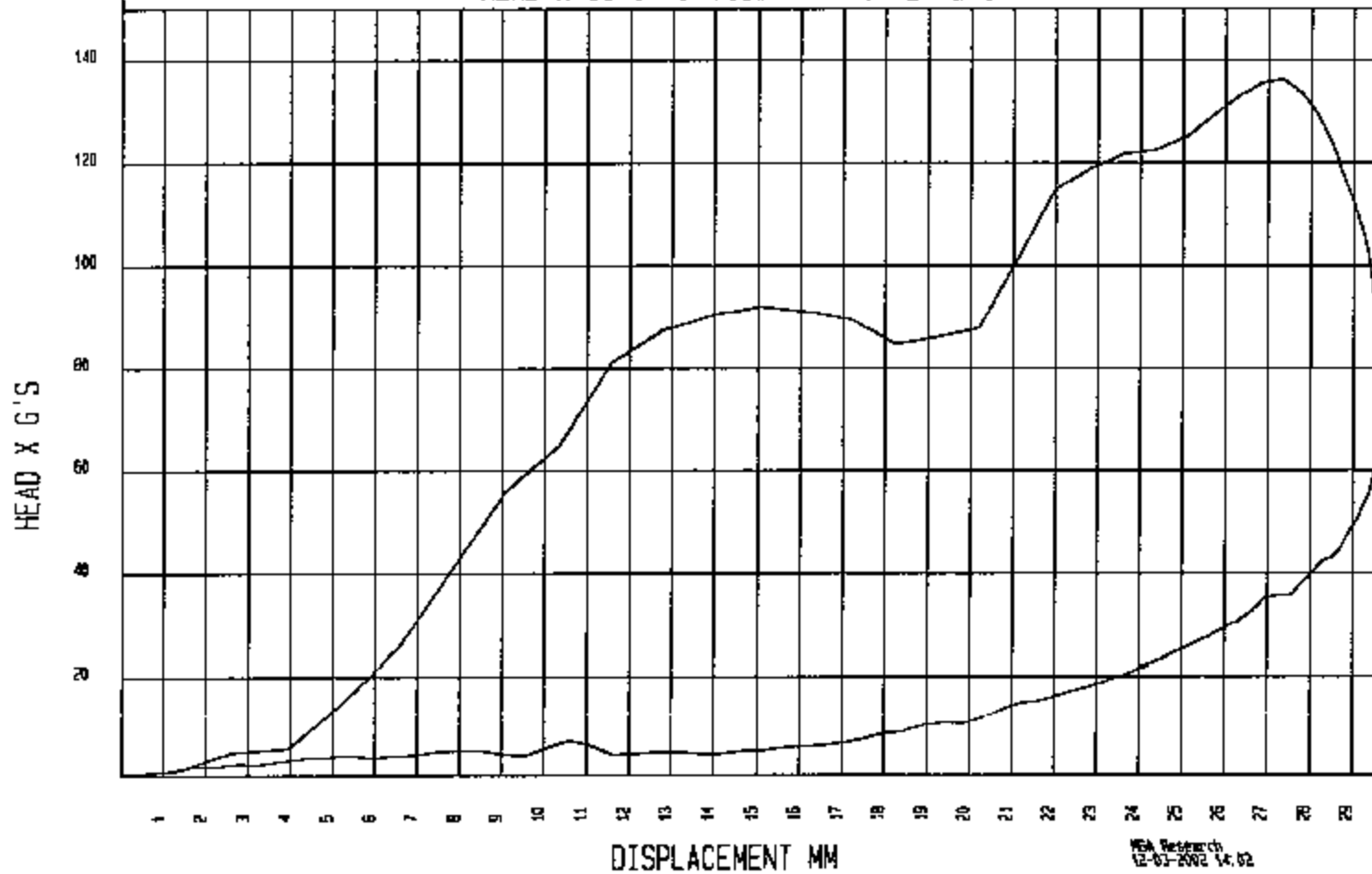
*Only necessary for NHTSA (Government) Compliance testing.

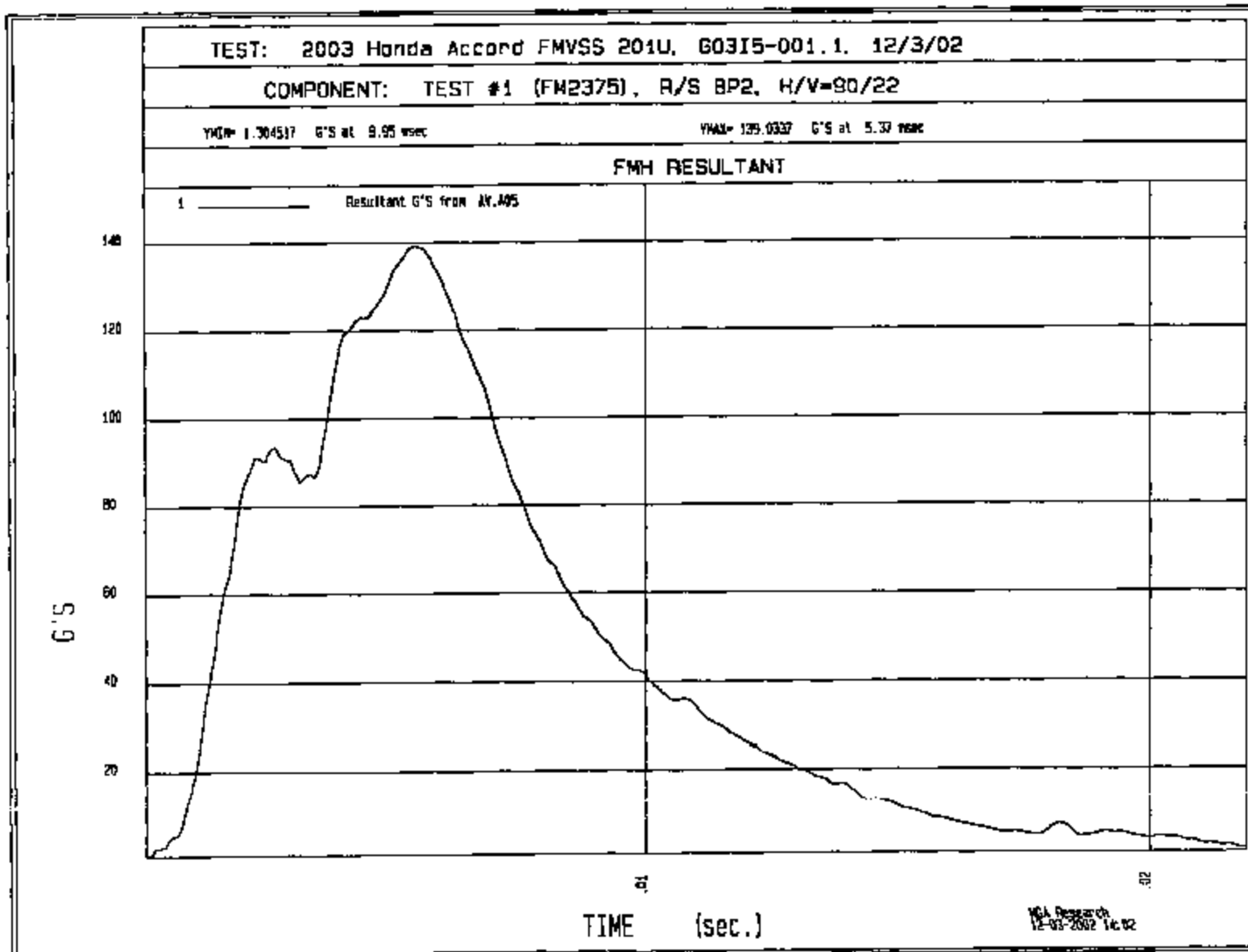
```
*****
RESULTS OF HIC36 PROGRAM
*****
The input file is \NHTSA\FM2375AV.A05
a HIC = 733.08 calculated over 6.8 msec
T1 = 1.49 msec T2 = 8.27 msec
*****
HIC(d) = 719
Impact Velocity = 23.8 (kph)
```

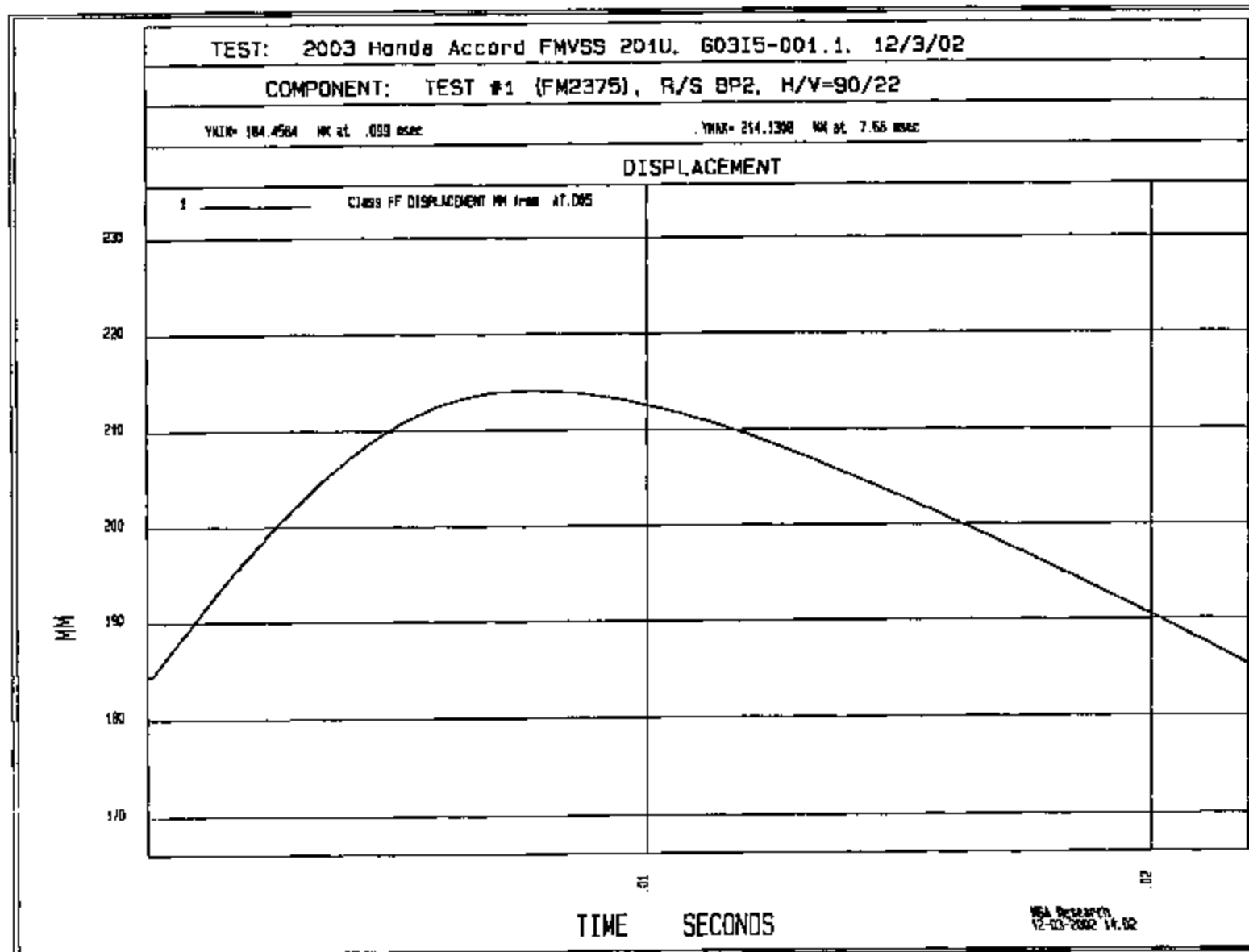
TEST: 2003 Honda Accord FMVSS 201U, G03I5-001.1, 12/3/02

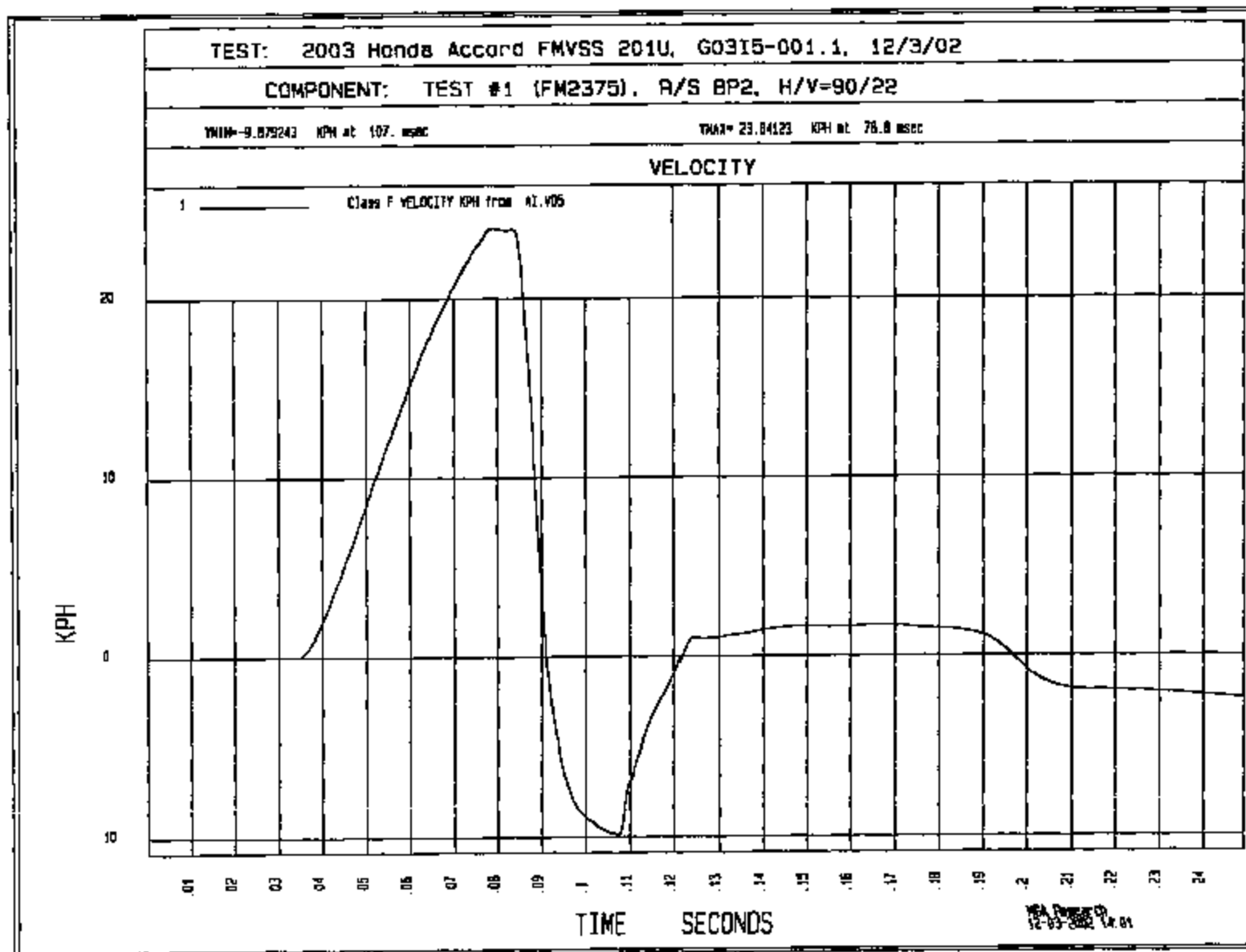
COMPONENT: TEST #1 (FM2375), R/S BP2, H/V=90/22

HEAD X as a function of DISPLACEMENT







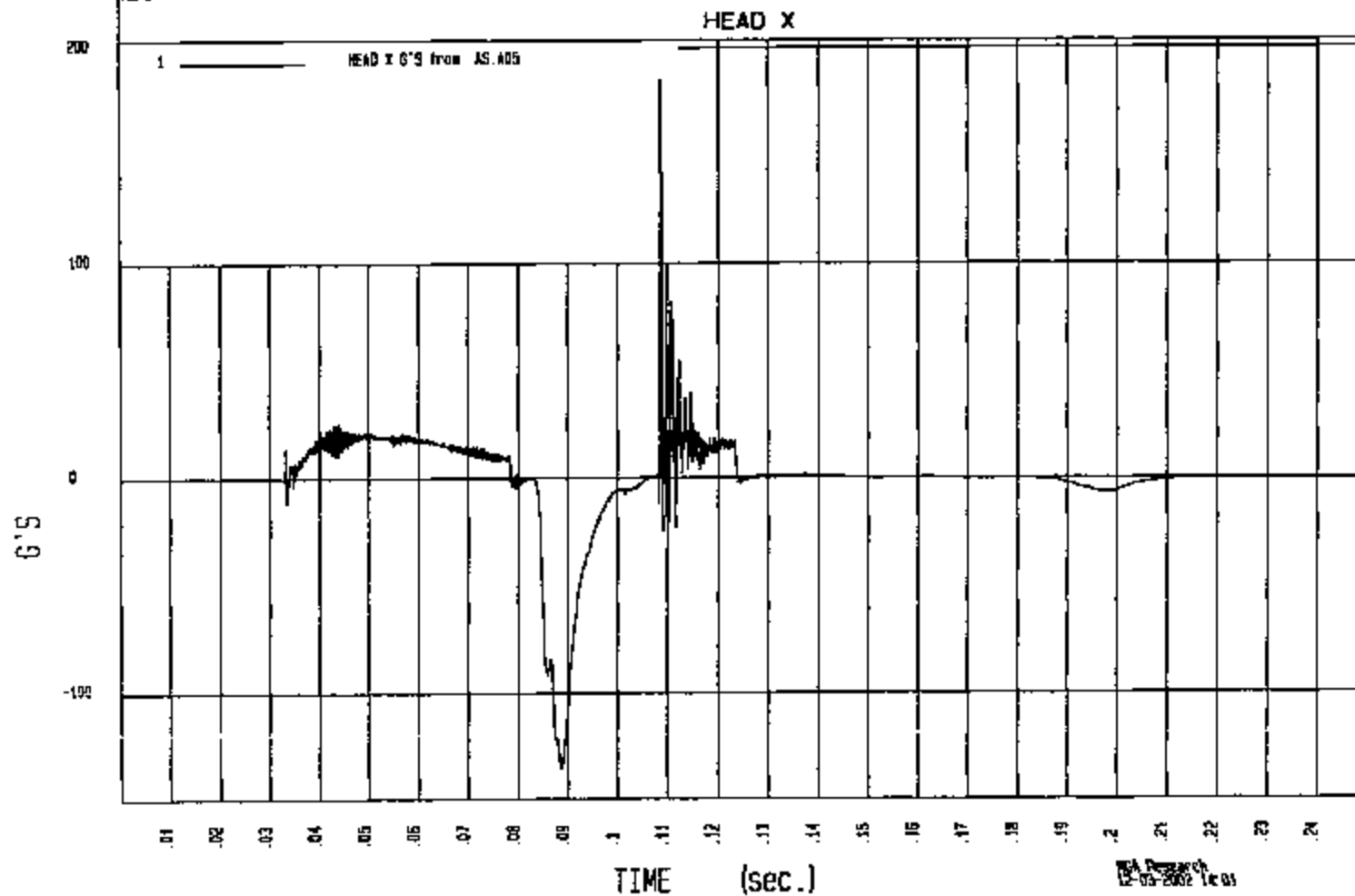


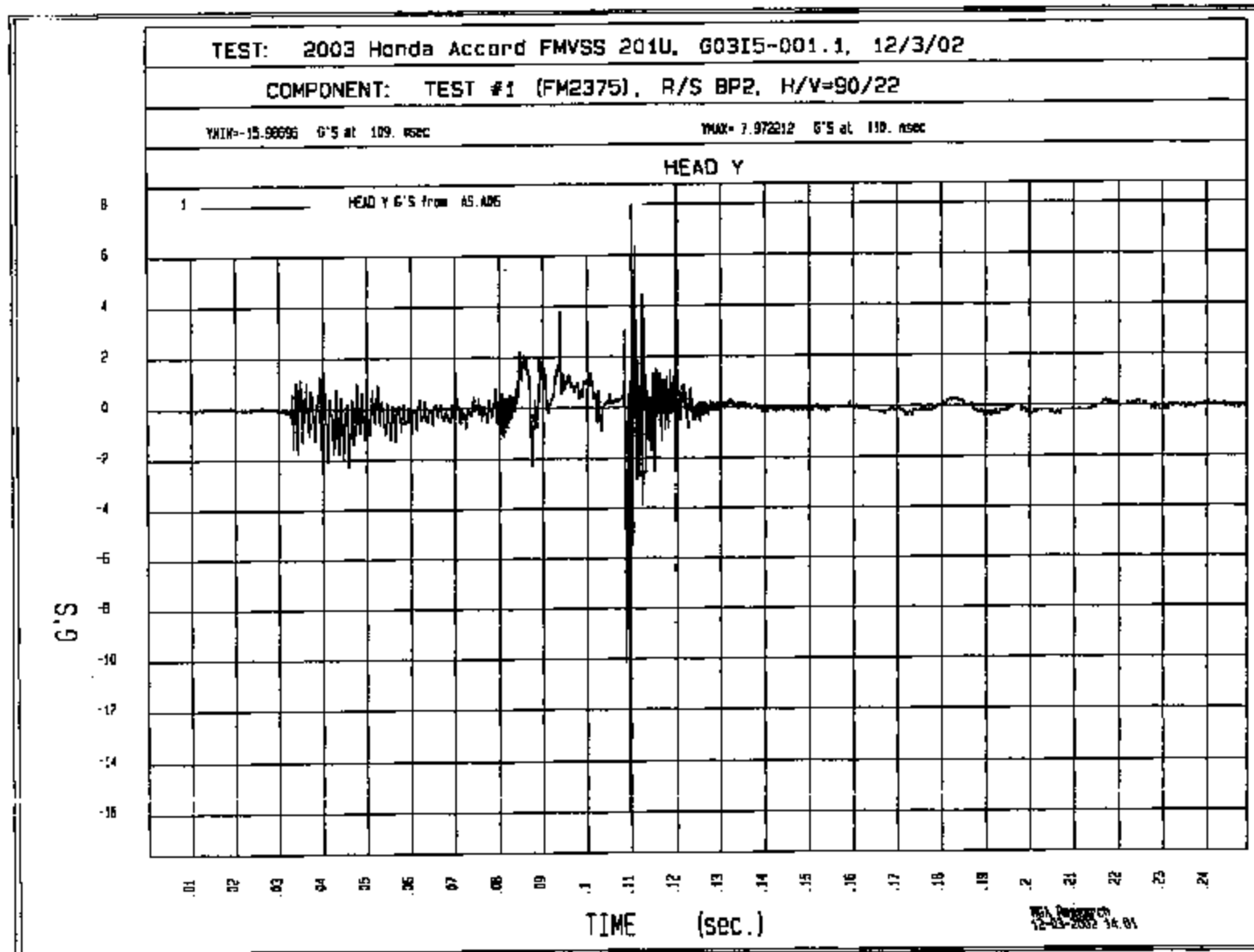
TEST: 2003 Honda Accord FMVSS 201U, 60315-001.1, 12/3/02

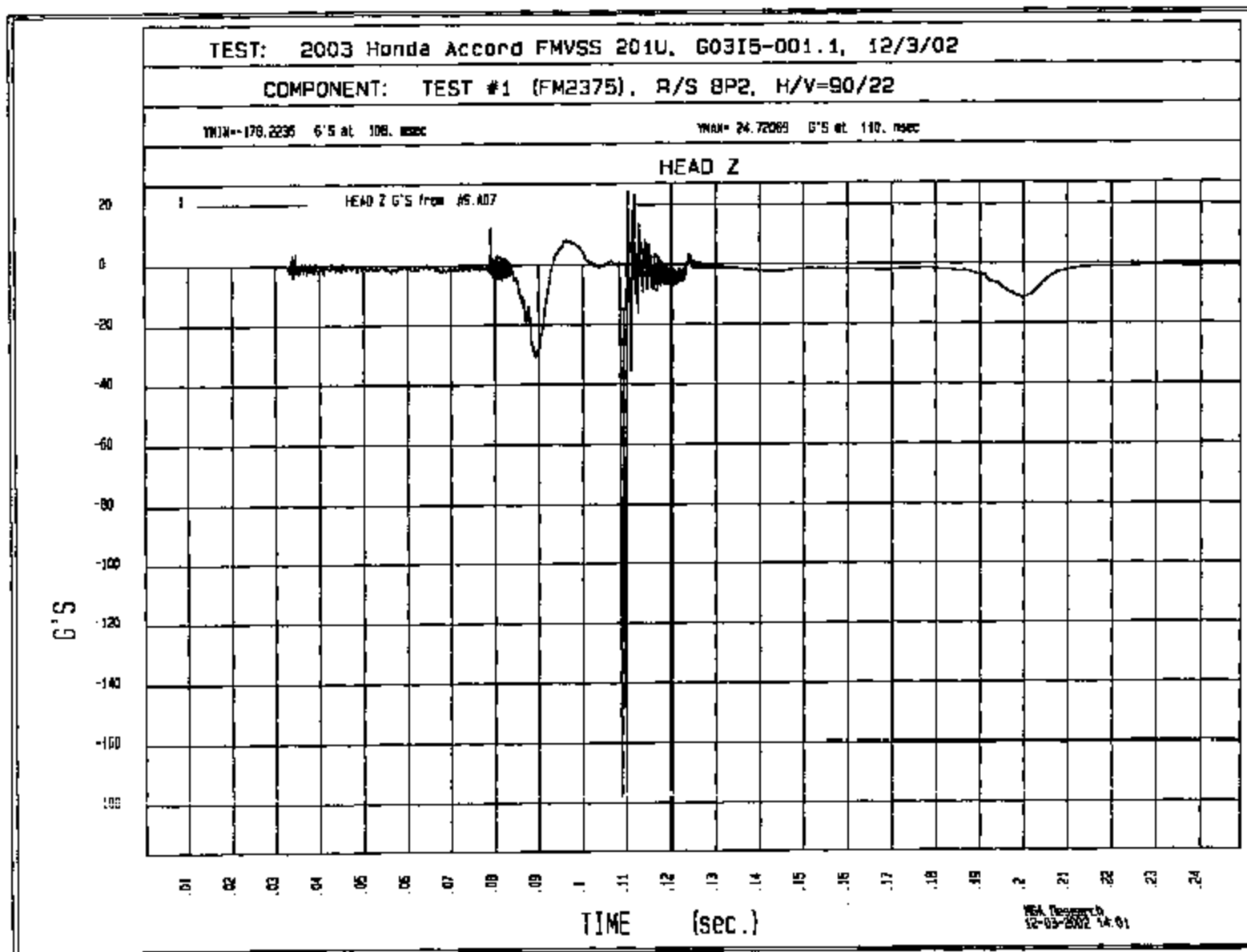
COMPONENT: TEST #1 (FM2375), R/S BP2, H/V=90/22

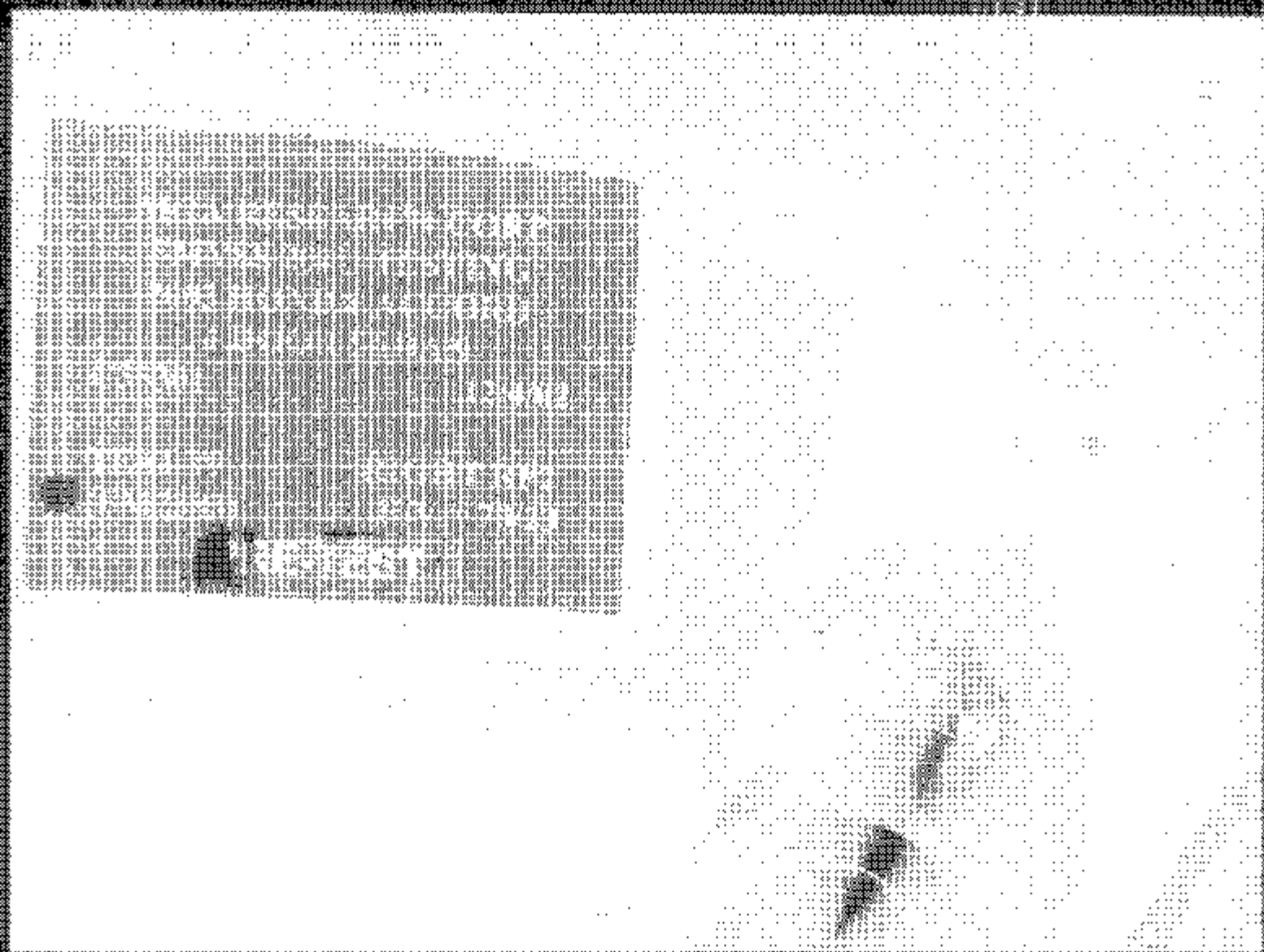
YMIN=-136.2343 G'S at .08.8 msec

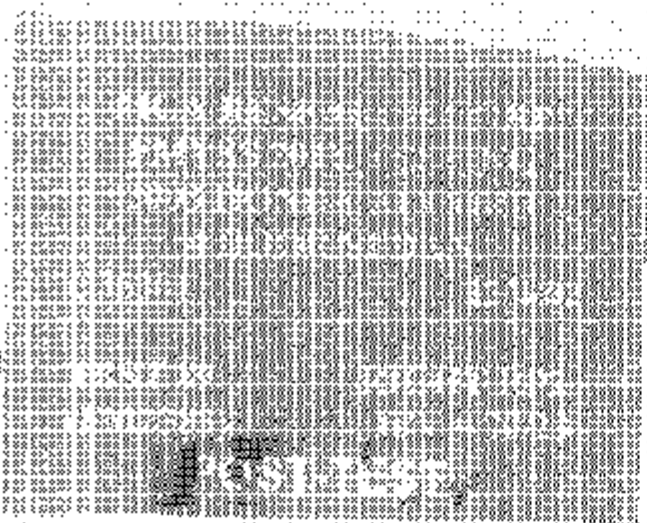
YMAX=185.1164 G'S at 108. msec











MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

1/24/02

TEST #9
(FM2383)

RICHIE RP2
H/V = 50/23

POST-TEST

MICHIGAN OPERATIONS
DATE: 10/18/01
SUPERCEDES: MGATP201U_FRAME #23

DOC. NO.: MGATP201U_FRAME #2
REVISION NO.: 4
PAGE 9 of 9

SUMMARY OF FMVSS 201U TEST

JOB/NHTSA NO.: C55301

VEHICLE YR/MAKE/MODEL: 2003 Honda Accord

GENERAL TEST PARAMETERS:

Test Number: 9

Target (Vehicle Side): left/right RPZ

Temperature: 73 °F/C

MGA Test Reference No.: FM23B3

Humidity: 22 %

Approach Angles: Horizontal 70 °

Time of Test: 2:09 am/pm

Vertical 23 °

FMH Serial No: 38

TEST RESULTS:

HIC(d)	HIC	Δt (msec)	Velocity (kph)	Impact location on FMH (mm)	
				Above Pt. O	<u>Left/Right</u> Pt. O
<u>620</u>	<u>601</u>	<u>7.1</u>	<u>23.9</u>	<u>14</u>	<u>1</u>

INSTRUMENTATION INFORMATION: (all accelerometers are Endevco 7264-2000)

Axis	Channel	Serial No.	DLR Value	ΔV Pre-Test	ΔV Post-Test
<u>X</u>	<u>5</u>	<u>J36197</u>	<u>-108.2</u>	<u>1.21</u>	<u>1.21</u>
<u>Y</u>	<u>6</u>	<u>J36193</u>	<u>102.0</u>	<u>1.23</u>	<u>1.23</u>
<u>Z</u>	<u>7</u>	<u>J36253</u>	<u>97.3</u>	<u>1.51</u>	<u>1.51</u>

REMARKS (Summary of test, damage, non-compliance, invalid test, etc.):

NO VISIBLE DAMAGE

Recorded By: [Signature] Approved By*: [Signature] Date: 12/4/02

*Only necessary for NHTSA (Government) Compliance testing.

RESULTS OF HIC36 PROGRAM

The input file is \NHTSA\FM2383AV.A05

HIC = 601.34 calculated over 7.1 msec

T1 = .90 msec T2 = 7.97 msec

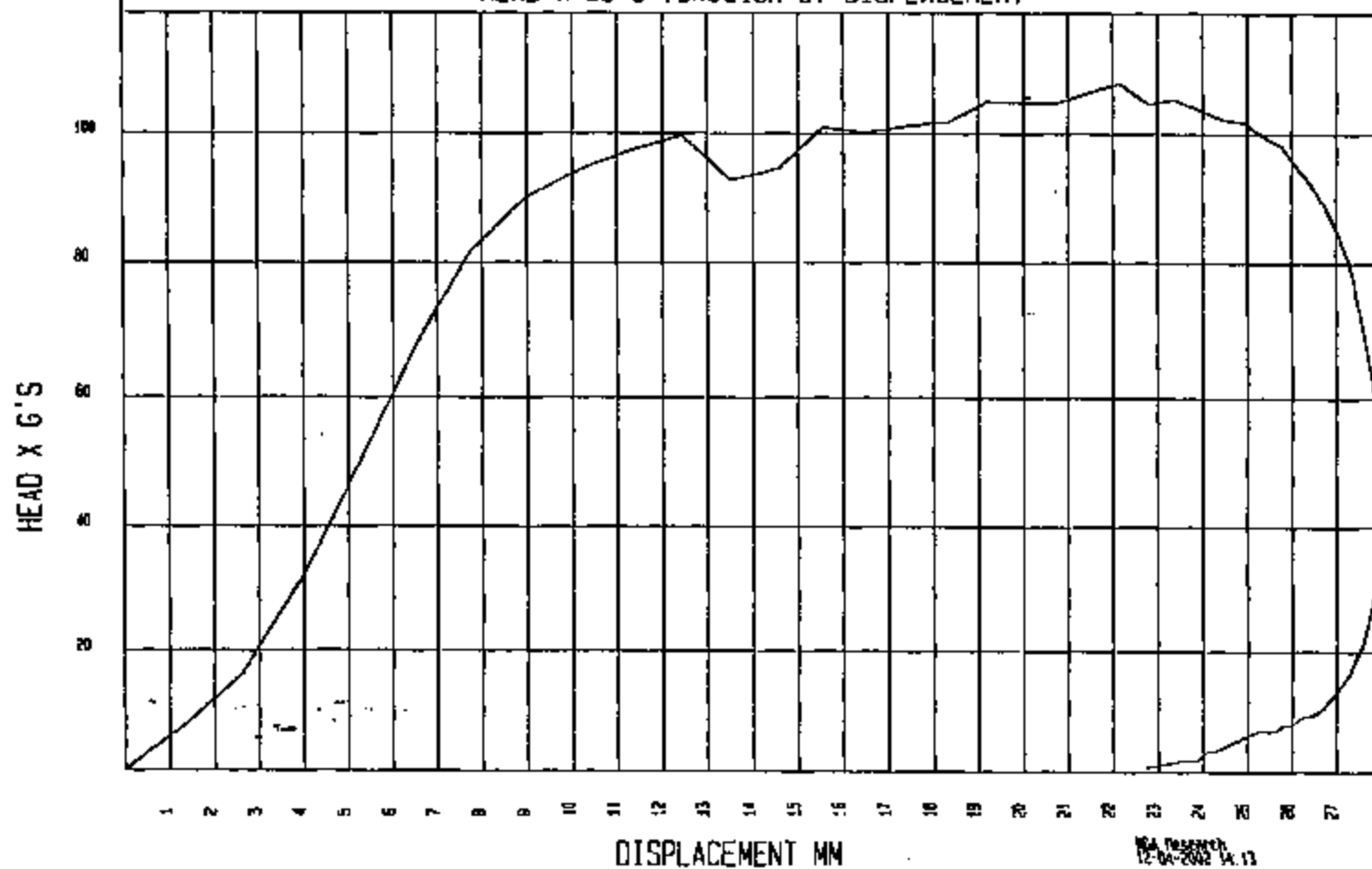
HIC(d) = 620

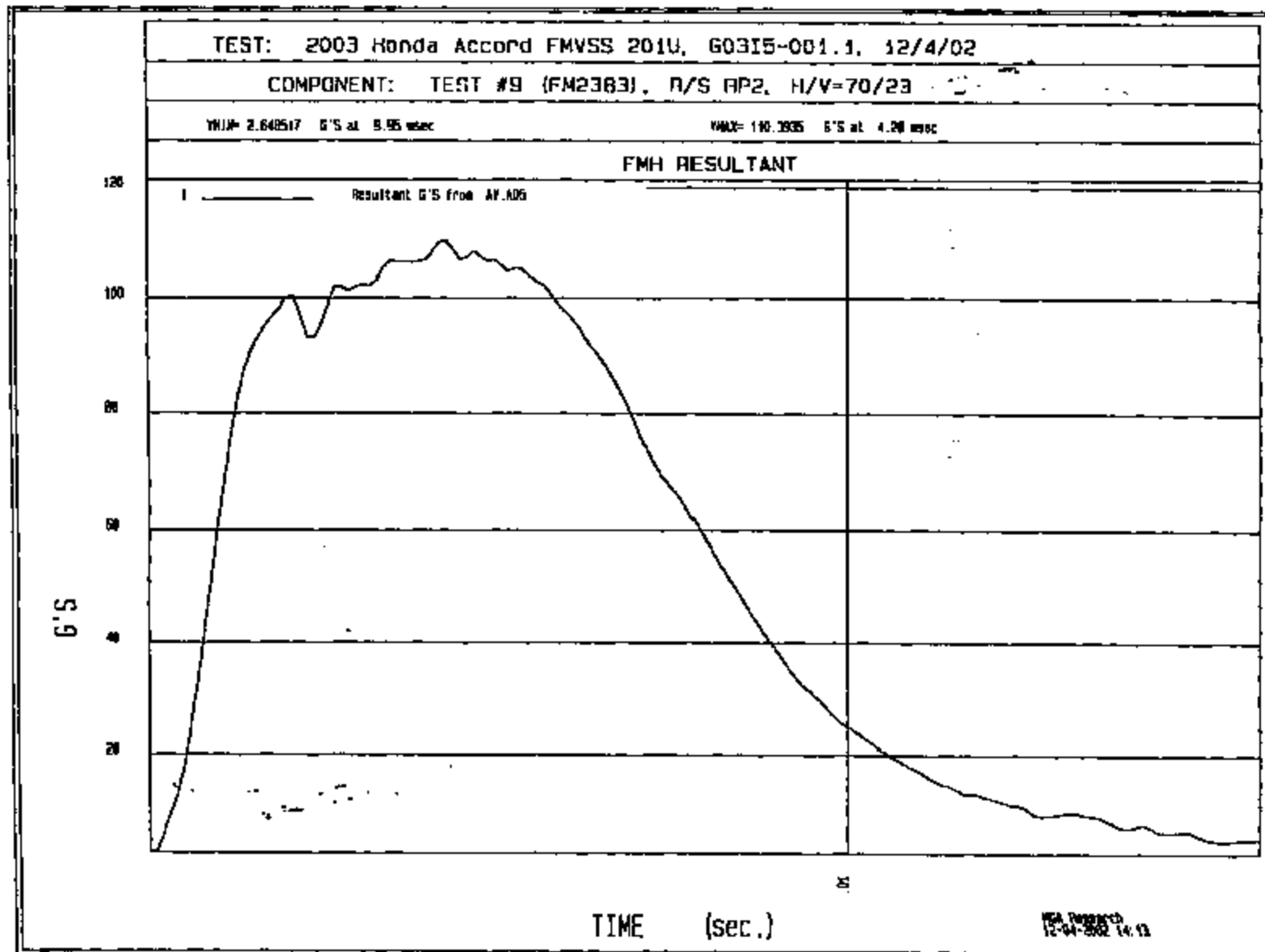
Impact Velocity = 23.9 (kph)

TEST: 2003 Honda Accord FMVSS 2010, 60315-001.1, 12/4/02

COMPONENT: TEST #9 (FM23B3), R/S RP2, H/V=70/23

HEAD X as a function of DISPLACEMENT





TEST: 2003 Honda Accord FMVSS 2010, G0315-001.1, 12/4/02

COMPONENT: TEST #9 (FM2383), R/S RP2, H/V=70/23

YMIN= 180.0236 IN at .033 msec

YMAX= 208.0058 IN at 0.36 msec

DISPLACEMENT

1 _____ Class FF DISPLACEMENT IN from AT.D05

220

210

200

190

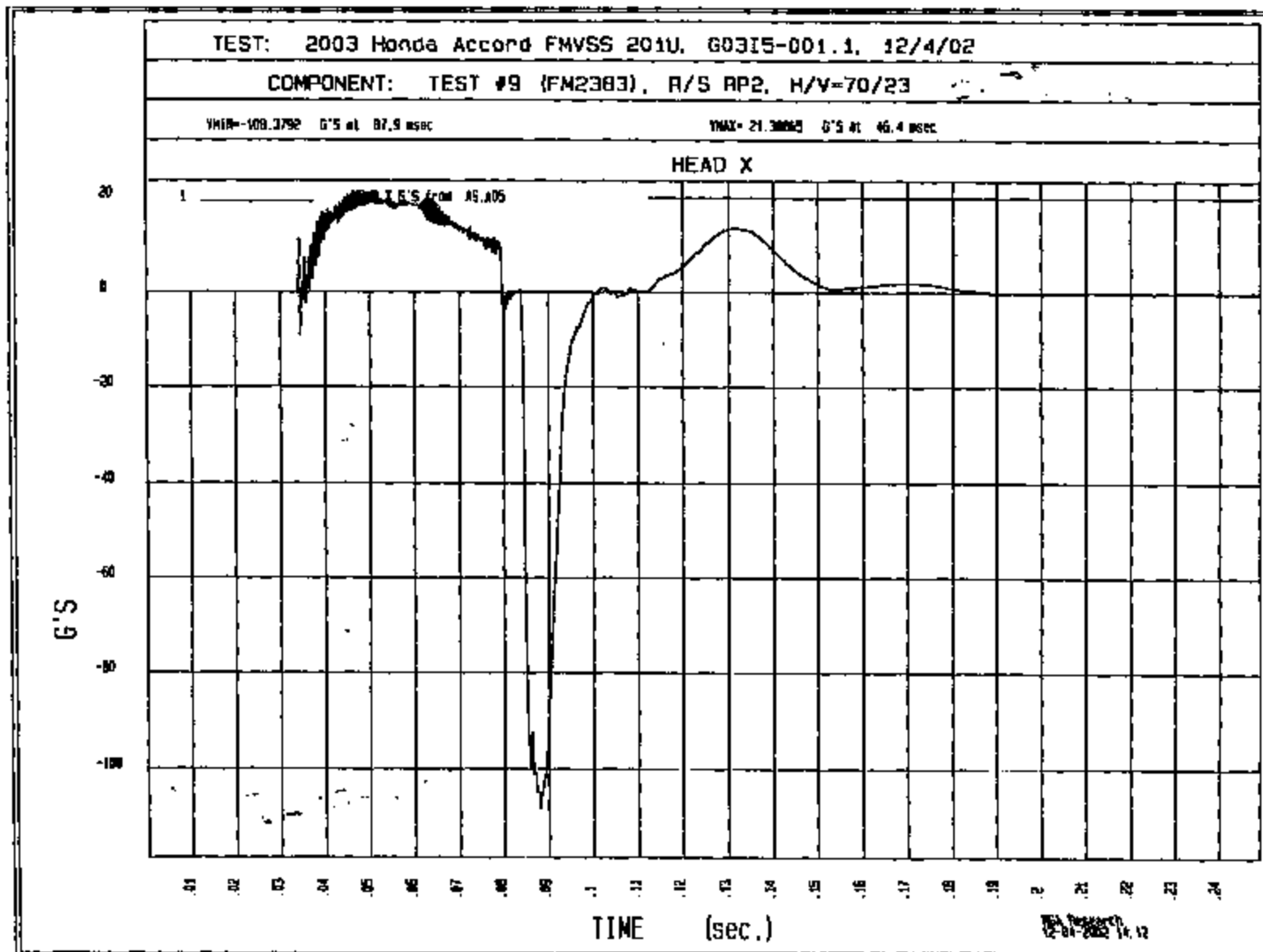
180

170

IN

TIME SECONDS

REVISION
12-1-2003



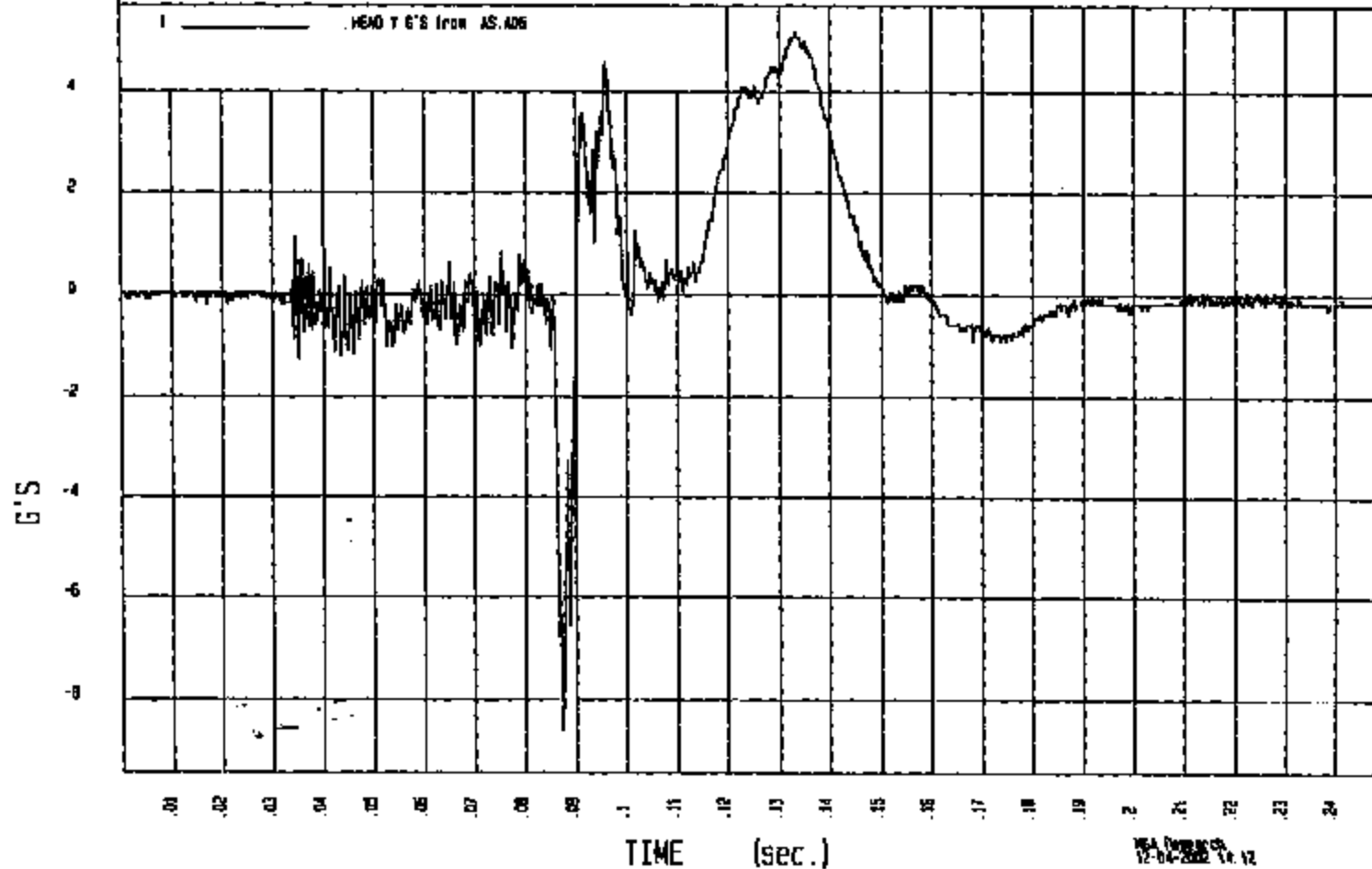
TEST: 2003 Honda Accord FMVSS 2010, G0315-001.1, 12/4/02

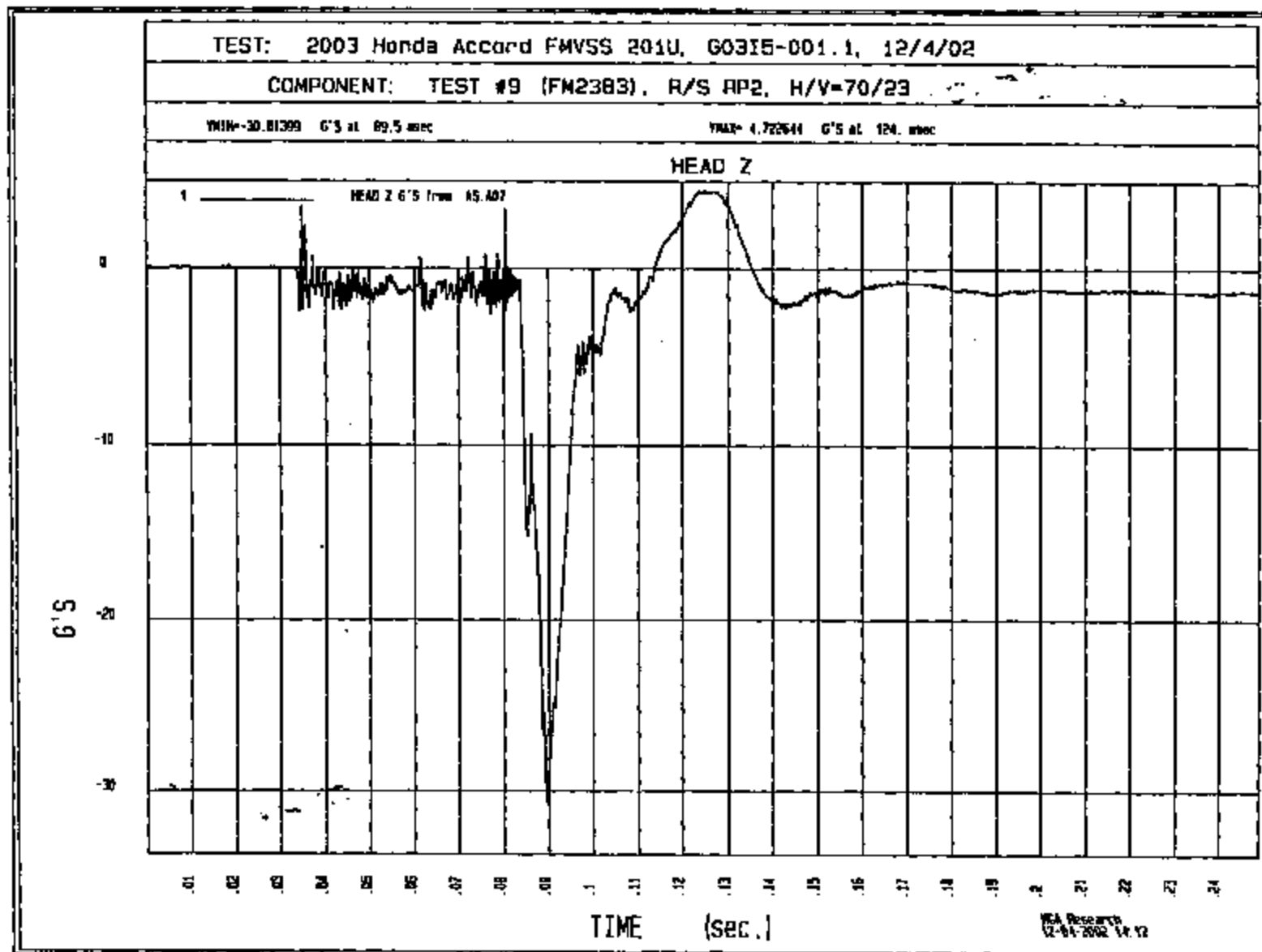
COMPONENT: TEST #9 (FM23B3), R/S RP2, H/V=70/23

YMIN=-8.624642 G'S at 87.2 msec

YMAX= 5.204821 G'S at 133. msec

HEAD Y



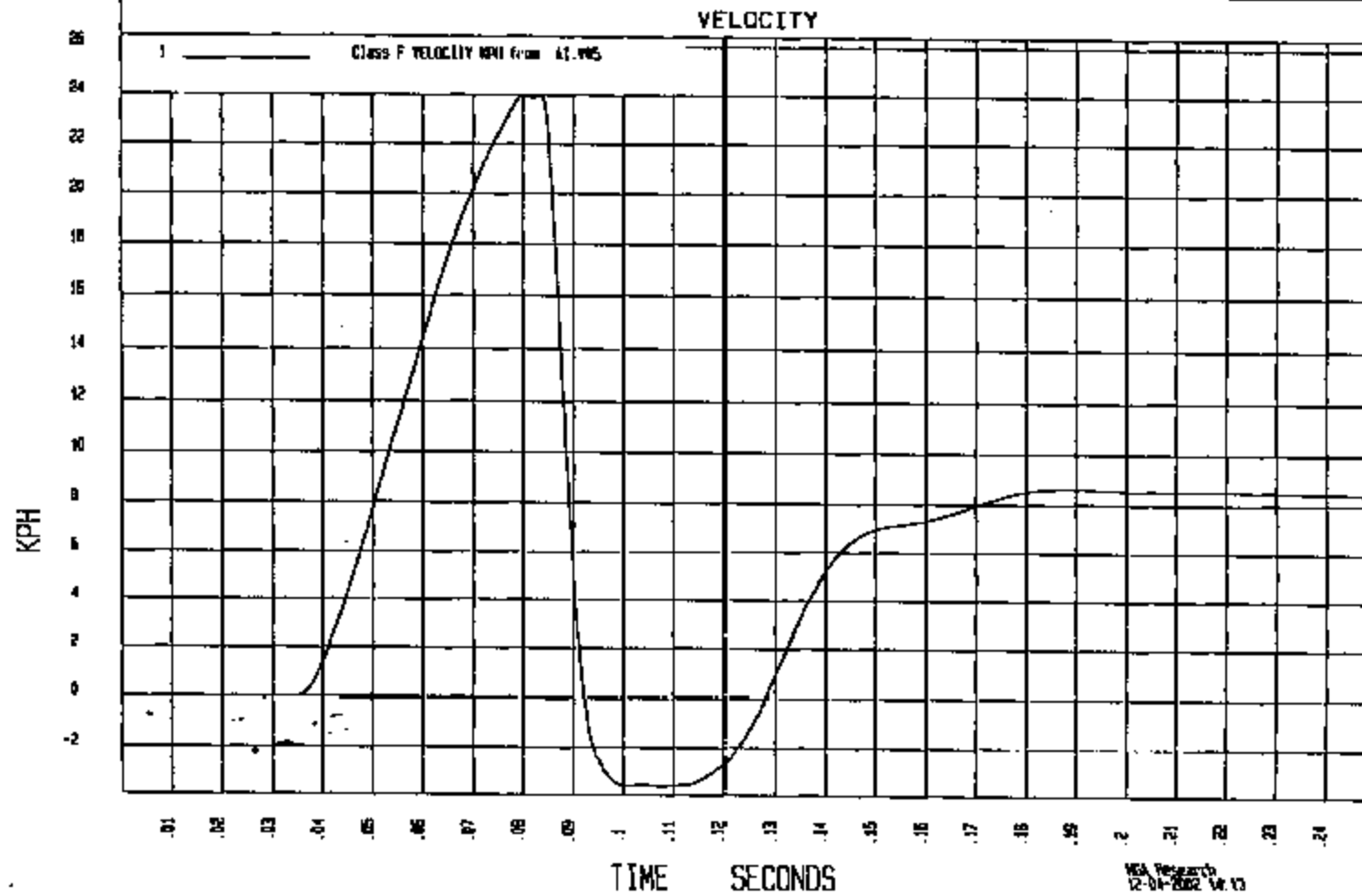


TEST: 2003 Honda Accord FMVSS 2010, G03I5-001.1, 12/4/02

COMPONENT: TEST #9 (FM2383), R/S RP2, H/V=70/23

TRIP=3.530435 MPH at 107.8800

MAX=24.00054 MPH at 80.00000



MCA RESEARCH CORP
PHYS TESTING
2000 HONDA ACCORD
4 DOOR SEDAN

C1501

12/3/02

TEST #4
(FM217B)RIGHT SIDE
HV - 90/22

PRE-TEST

5301

2378

S

/22

ADGA RESEARCH CORP
FMVSS 2011 TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C3591

12/3/02

TEST #4

RIGHT SR1

(FMVSS)

ENV - 96/12

POST-TEST

**MGA RESEARCH CORP
FMVSS 2010 TESTING
2003 HONDA ACCORD
4 DOOR SEDAN**

C35301

12/3/02

**TEST #4
(FM12378)**

**RIGHT SR1
H/V = 90/22**

POST-TEST

MICHIGAN OPERATIONS
DATE: 10/18/01
SUPERCEDES: MGATP201U_FRAME #2.3

DOC. NO.: MGATP201U_FRAME #2
REVISION NO.: 4
PAGE 9 of 9

SUMMARY OF FMVSS 201U TEST

JOB/NHTSA NO: C35301 VEHICLE YR/MAKE/MODEL: 2003 1600A Accord

GENERAL TEST PARAMETERS:

Test Number: 4

Target (Vehicle Side): Left/Right SRL

Temperature: 73 CEP

MGA Test Reference No.: FM2378

Humidity: 22 %

Approach Angles: Horizontal 90 °

Time of Test: 4:50 am/pm

Vertical 22 °

FMH Serial No: 35

TEST RESULTS:

HIC(d)	HIC	Δt (msec)	Velocity (kph)	Impact location on FMH (mm)	
				Above Pt. O	<u>Left/Right</u> Pt. O
<u>260</u>	<u>124</u>	<u>7.8</u>	<u>13.9</u>	<u>52</u>	<u>1</u>

INSTRUMENTATION INFORMATION: (all accelerometers are Endevco 7264-2000)

Axis	Channel	Serial No.	DLR Value	ΔV Pre-Test	ΔV Post-Test
<u>X</u>	<u>5</u>	<u>J35924</u>	<u>-93.1</u>	<u>1.21</u>	<u>1.21</u>
<u>Y</u>	<u>6</u>	<u>J35919</u>	<u>95.3</u>	<u>1.23</u>	<u>1.23</u>
<u>Z</u>	<u>7</u>	<u>J31051</u>	<u>95.1</u>	<u>1.51</u>	<u>1.51</u>

REMARKS (Summary of test, damage, non-compliance, invalid test, etc.):

NO VISIBLE DAMAGE

Recorded By: [Signature] Approved By: [Signature] Date: 12/3/02

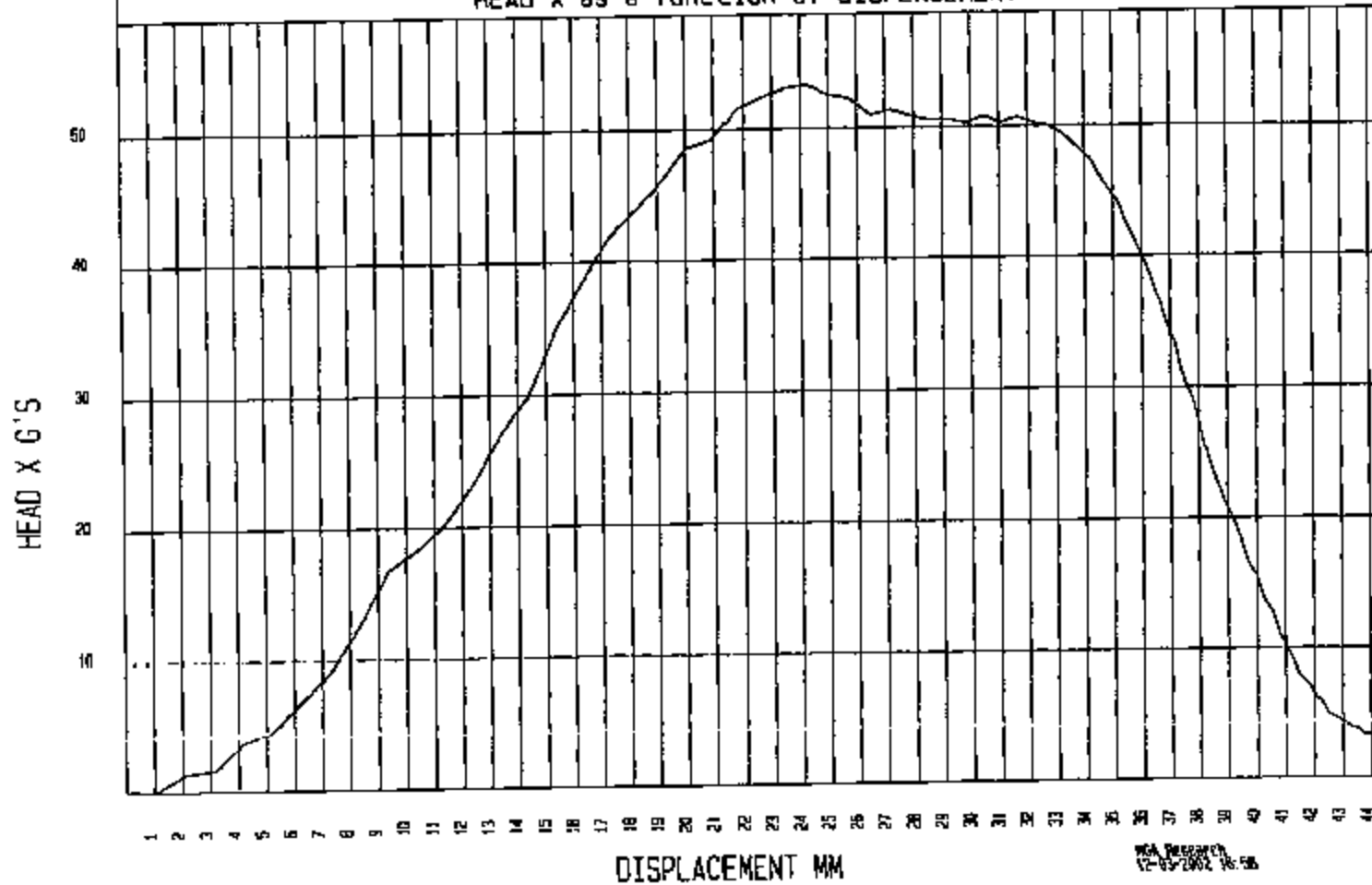
*Only necessary for NHTSA (Government) Compliance testing.

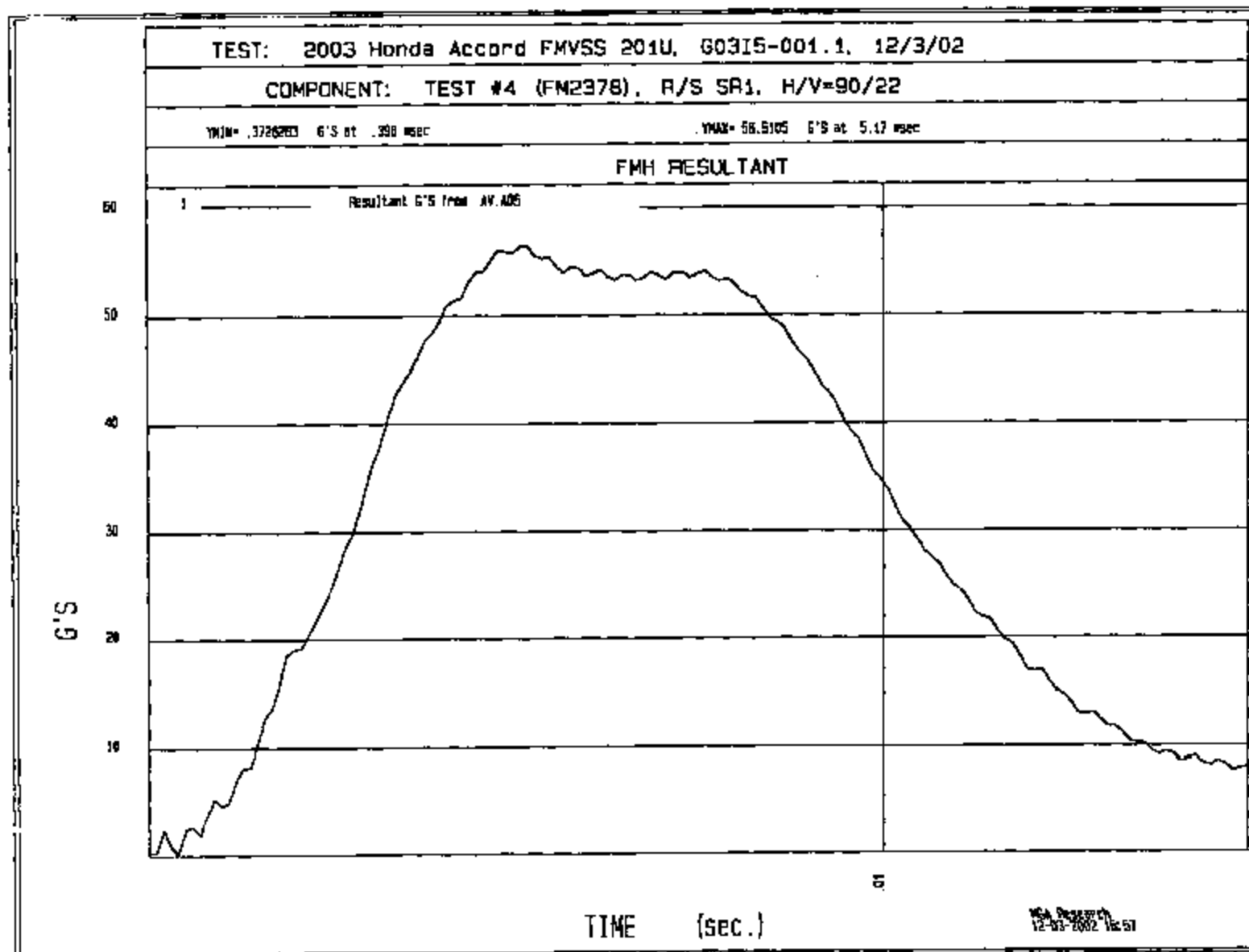
```
*****
RESULTS OF HIC36 PROGRAM
*****
The input file is \NHTSA\FM2378AV.A05
: HIC = 124.04 calculated over 7.8 msec
T1 = 2.59 msec T2 = 10.36 msec
*****
HIC(d) = 260
Impact Velocity = 18.9 (kph)
```

TEST: 2003 Honda Accord FMVSS 2010, G03I5-001.1, 12/3/02

COMPONENT: TEST #4 (FM237B), R/S SR1, H/V=90/22

HEAD X as a function of DISPLACEMENT





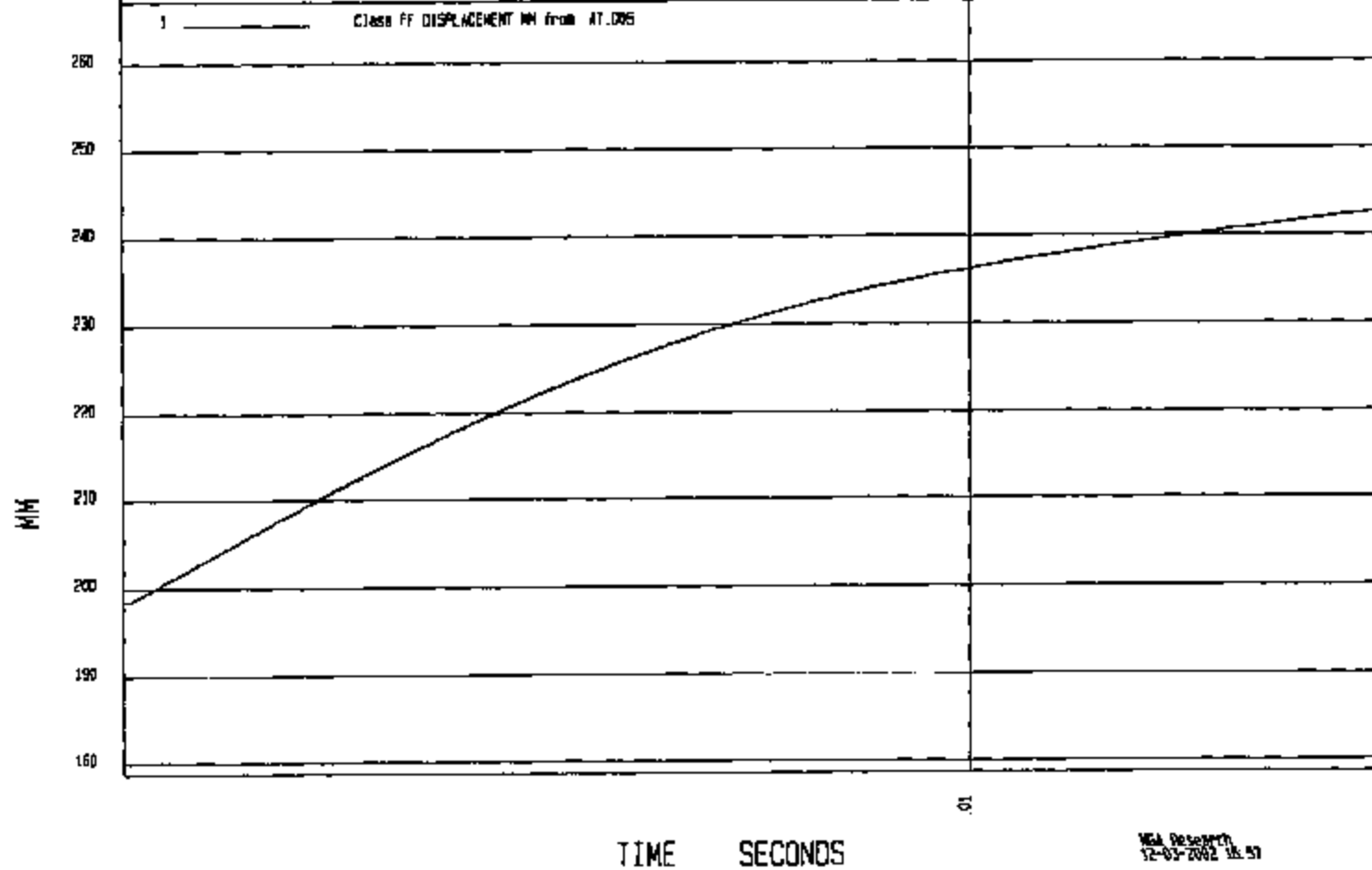
TEST: 2003 Honda Accord FMVSS 2010, 60315-001.1, 12/3/02

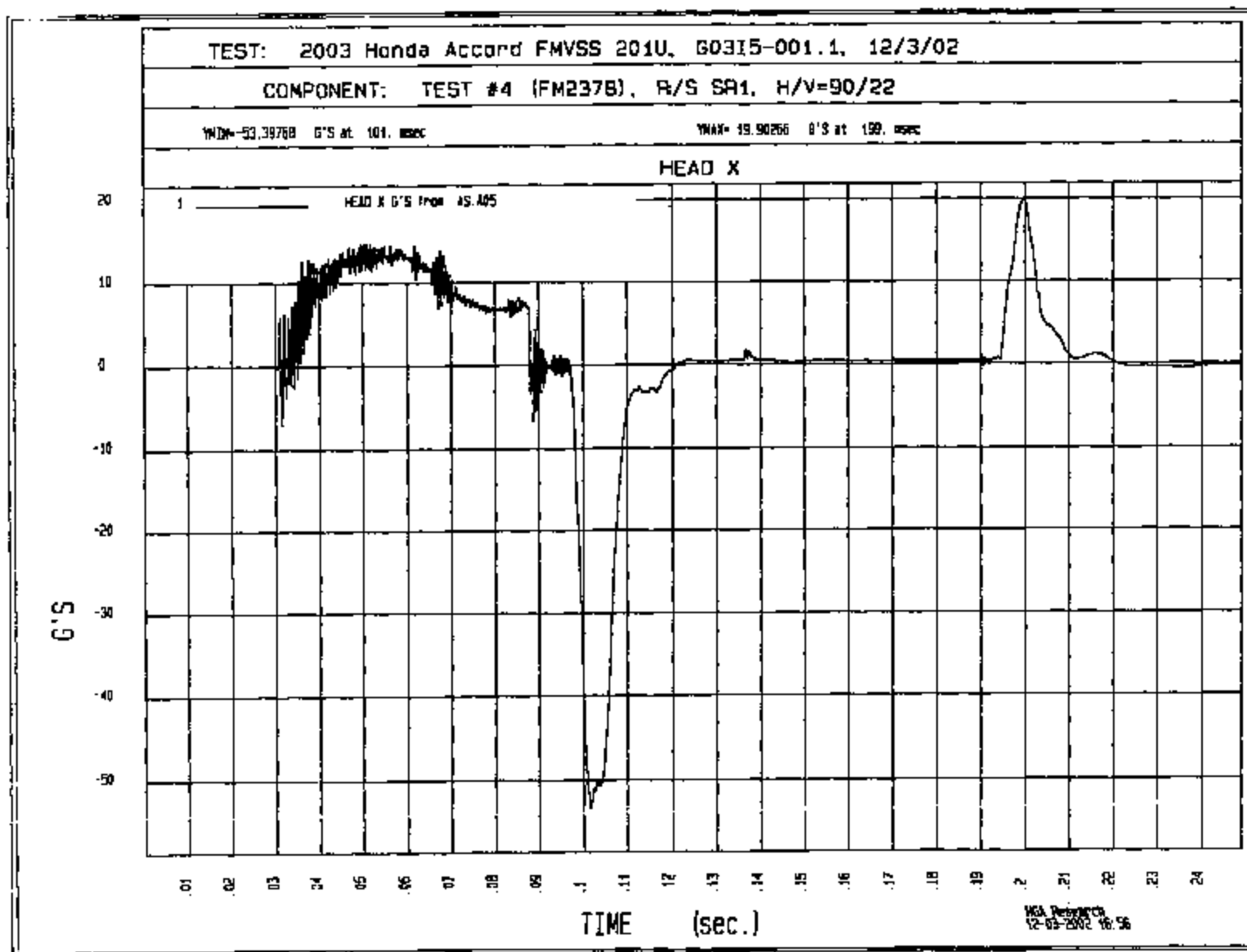
COMPONENT: TEST #4 (FM2378), R/S SR1, H/V=90/22

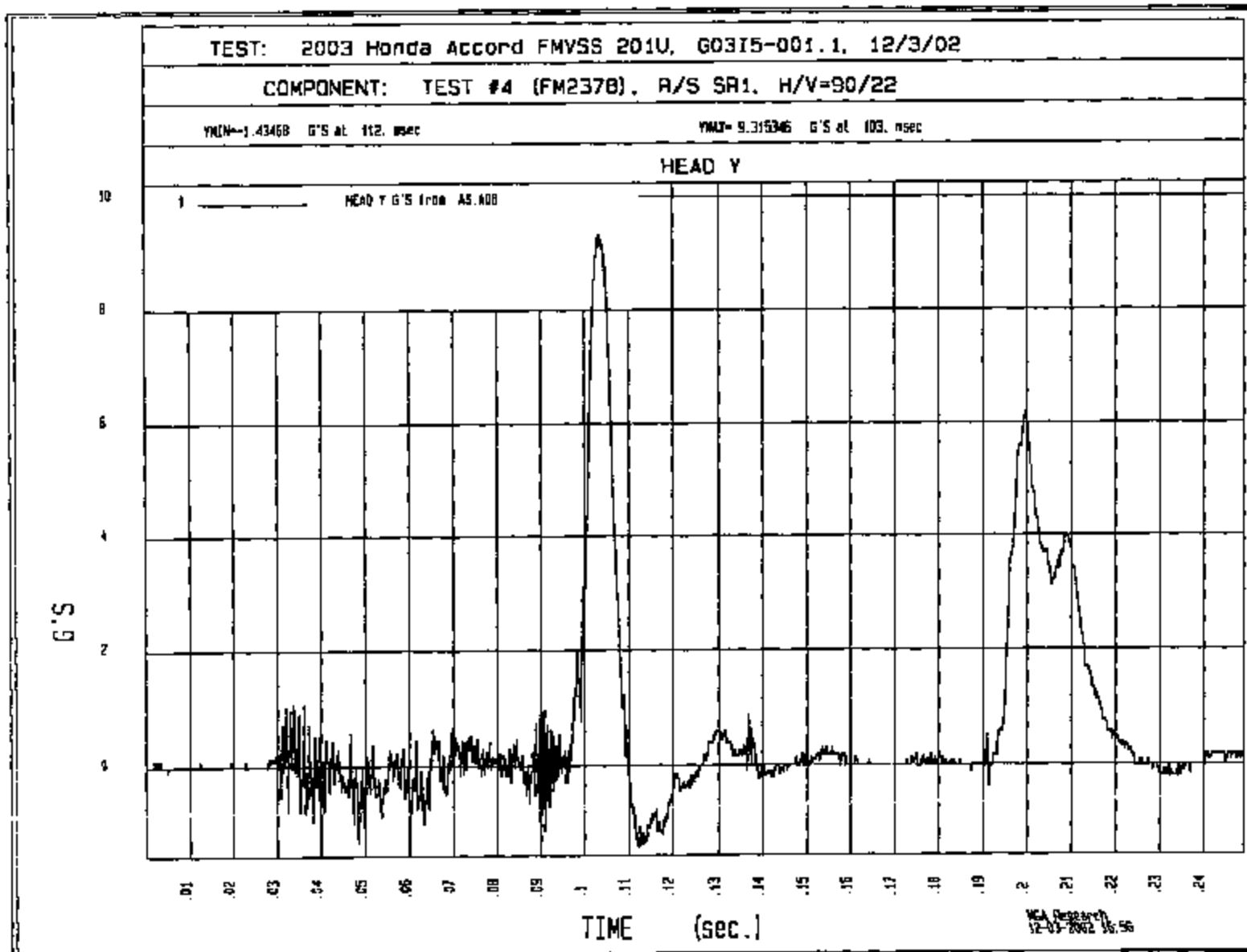
YMIN= 198.518 MM AT .095 msec

YMAX= 242.8479 MM AT 14.9 msec

DISPLACEMENT







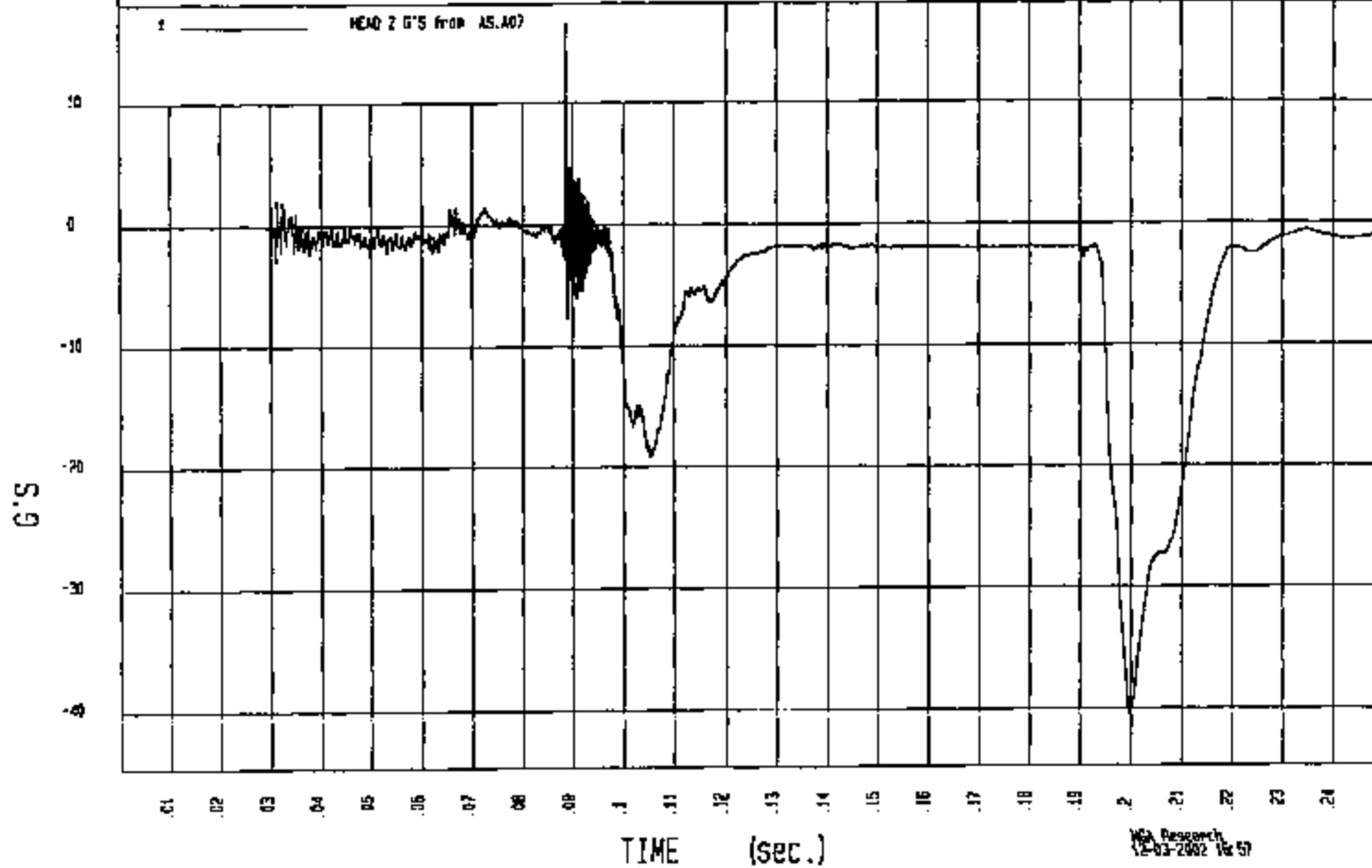
TEST: 2003 Honda Accord FMVSS 2010, 60315-001.1, 12/3/02

COMPONENT: TEST #4 (FM2378), R/S SR1, H/V=90/22

MIN=-40.60835 G'S at 199. msec

MAX= 16.47954 G'S at 88.6 msec

HEAD Z



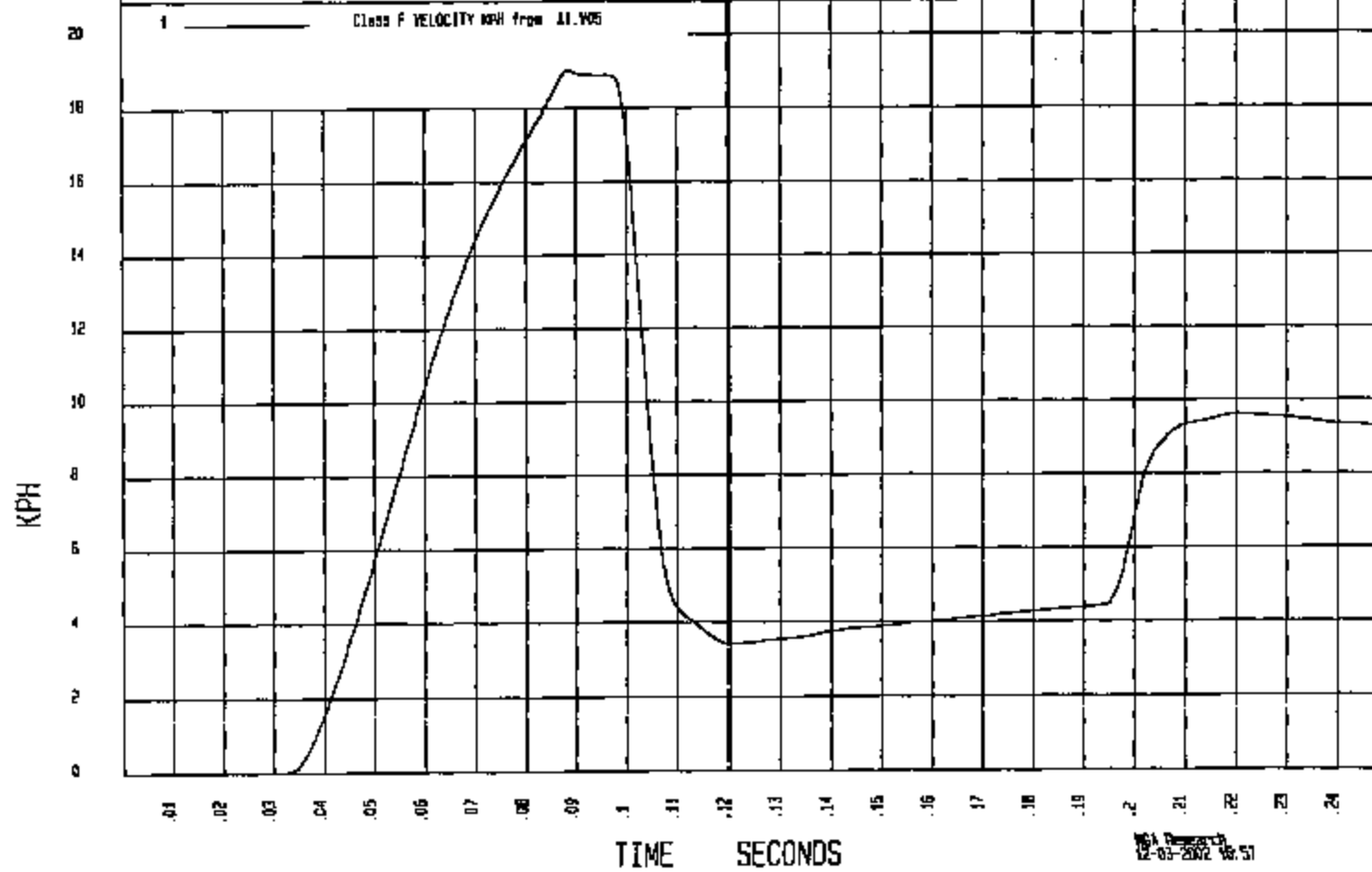
TEST: 2003 Honda Accord FMVSS 201U, G0315-001.1, 12/3/02

COMPONENT: TEST #4 (FM2378), R/S SR1, H/V=90/22

YMIN=-2.5/2001E-03 KPH at 29.3 msec

YMAX= 19.0237 KPH at 88.2 msec

VELOCITY



MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

12/3/02

TEST #3
(FM2377)

RIGHT SR2A
H/V = 90/25

PRE-TEST

C35301
FM2377
R/S SR2A
90/25

MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301 12/3/02

TEST #3 RIGHT SR2A
(FM2377) H/V = 90/25

POST-TEST

**MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN**

C35301

12/3/02

**TEST #3
(FM2377)**

**RIGHT SR2A
H/V = 90/25**

POST-TEST

MICHIGAN OPERATIONS
DATE: 10/18/01
SUPERCEDES: MGATP201U_FRAME #2.3

DOC. NO.: MGATP201U_FRAME #2
REVISION NO.: 4
PAGE 9 of 9

SUMMARY OF FMVSS 201U TEST

JOB/NHTSA NO: C35301 VEHICLE YR/MAKE/MODEL: 2003 H2000 Pickup

GENERAL TEST PARAMETERS:

Test Number: 3

Target (Vehicle Side): left/right SLDA

Temperature: 72 (F) °C

MGA Test Reference No.: F42577

Humidity: 22 %

Approach Angles: Horizontal 90 °

Time of Test: 3:15 am/pm

Vertical 25 °

FMH Serial No: 38

TEST RESULTS:

HIC(d)	HIC	Δt (msec)	Velocity (kph)	Impact location on FMH (mm)	
				Above Pt. O	<u>Left/Right</u> Pt. O
<u>302</u>	<u>180</u>	<u>7.0</u>	<u>18.6</u>	<u>32</u>	<u>2</u>

INSTRUMENTATION INFORMATION: (all accelerometers are Endevco 7264-2000)

Axis	Channel	Serial No.	DLR Value	ΔV Pre-Test	ΔV Post-Test
<u>X</u>	<u>5</u>	<u>J36197</u>	<u>-108.2</u>	<u>1.21</u>	<u>1.21</u>
<u>Y</u>	<u>6</u>	<u>J36193</u>	<u>102.0</u>	<u>1.23</u>	<u>1.23</u>
<u>Z</u>	<u>7</u>	<u>J36353</u>	<u>97.8</u>	<u>1.51</u>	<u>1.51</u>

REMARKS (Summary of test, damage, non-compliance, invalid test, etc.):

NO VISIBLE DAMAGE

Recorded By: [Signature] Approved By*: [Signature] Date: 12/3/02

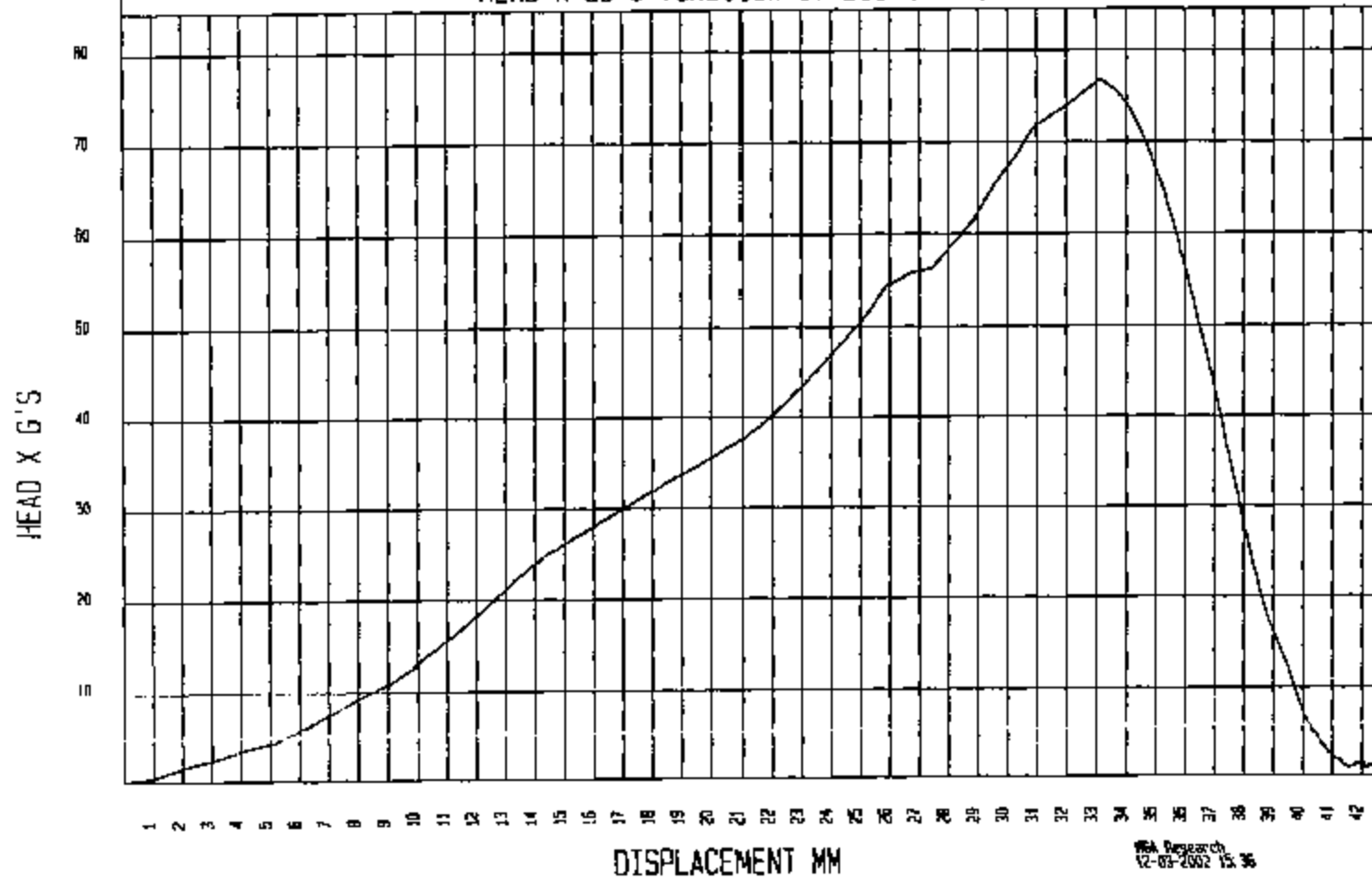
*Only necessary for NHTSA (Government) Compliance testing.


```
*****
RESULTS OF HIC36 PROGRAM
*****
The input file is \NHTSA\FM2377AV.A05
> HIC = 179.53 calculated over 7.0 msec
T1 = 3.49 msec T2 = 10.46 msec
*****
HIC(d) = 302
Impact Velocity = 18.6 (kph)
```

TEST: 2003 Honda Accord FMVSS 201U, G03I5-001.1, 12/3/02

COMPONENT: TEST #3 (FM2377), R/S SR2A, H/V=90/25

HEAD X as a function of DISPLACEMENT



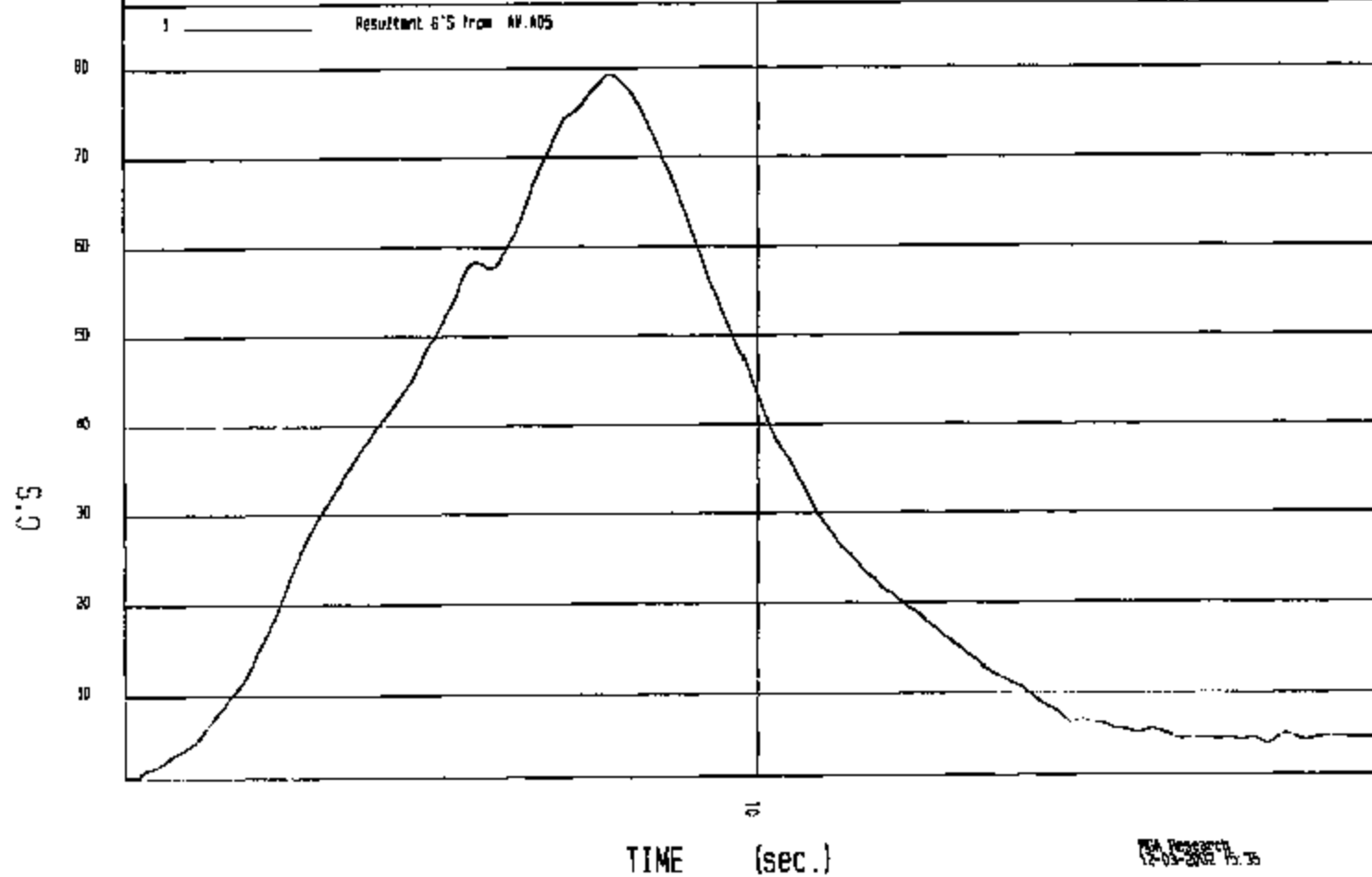
TEST: 2003 Honda Accord FMVSS 201U, 60315-001.1, 12/3/02

COMPONENT: TEST #3 (FM2377), R/S SR2A, H/V=90/25

YMIN= .9411412 G'S at .199 msec

YMAX= 79.26327 G'S at 7.65 msec

FMH RESULTANT



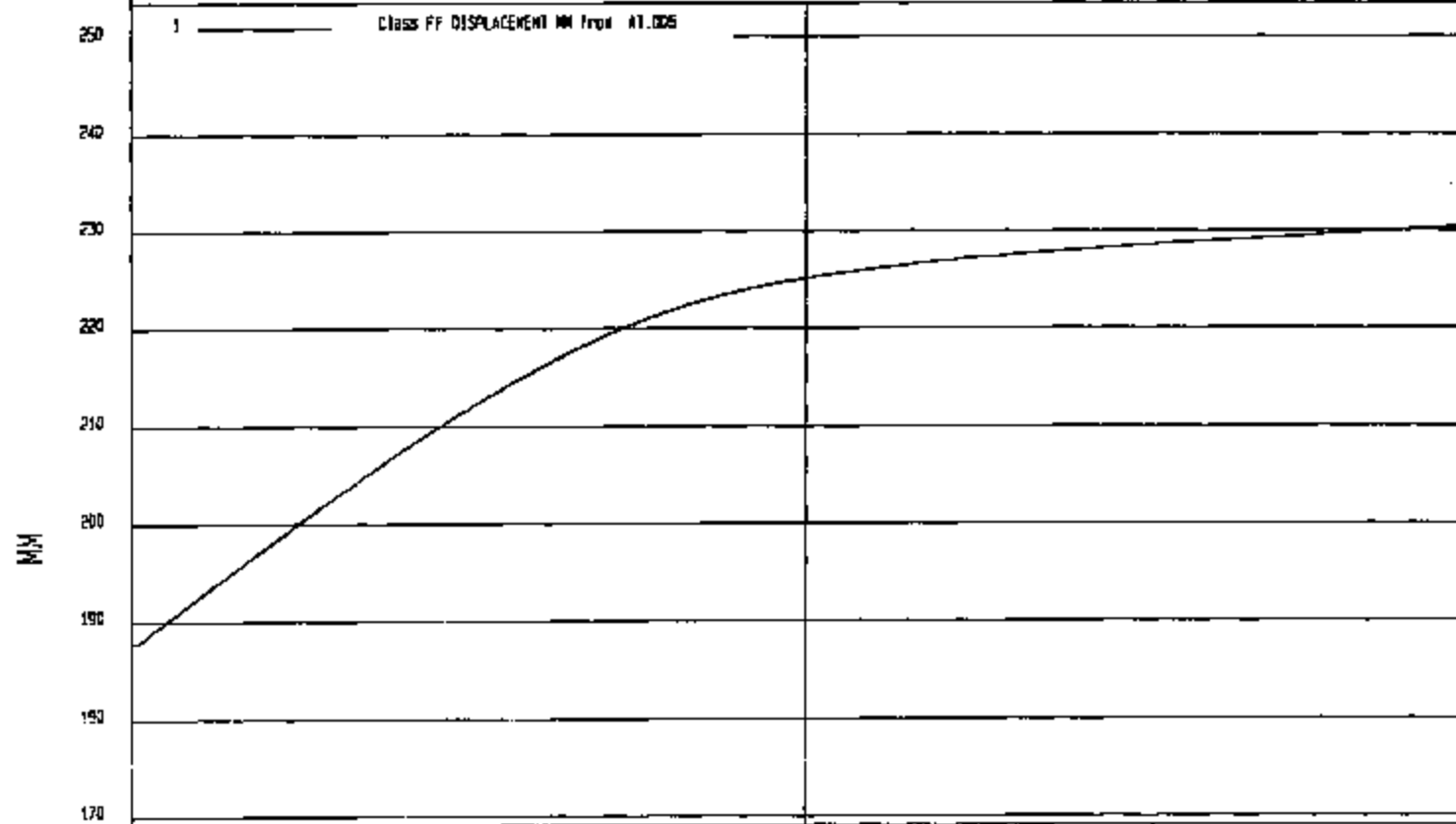
TEST: 2003 Honda Accord FMVSS 201U, 60315-001.1, 12/3/02

COMPONENT: TEST #3 (FM2377). R/S SR2A, H/V=90/25

WTN= 167.8094 MM at .099 msec

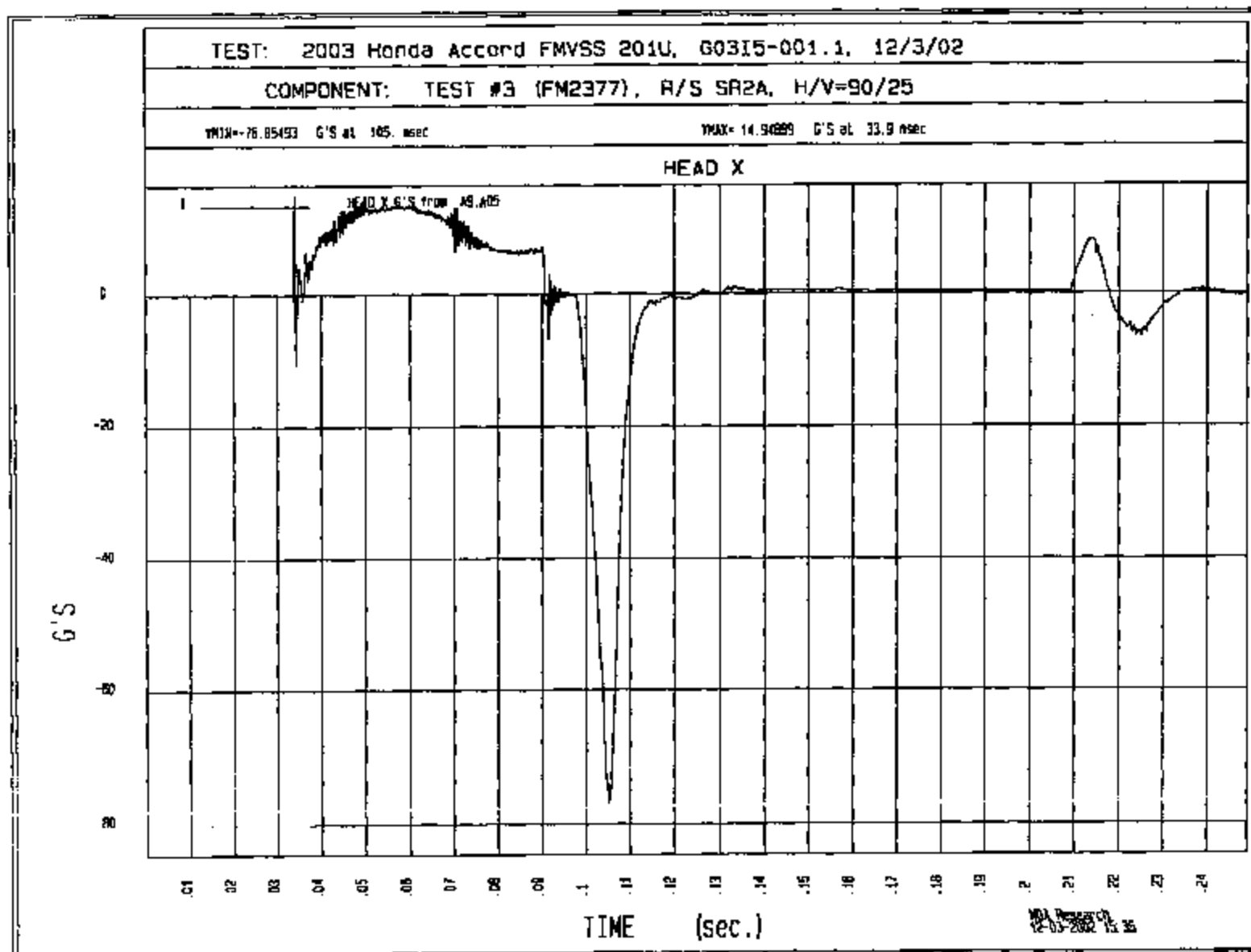
TMAX= 230.4722 MM at 19.9 msec

DISPLACEMENT



TIME SECONDS

NSA Research
12-03-2002 15:36



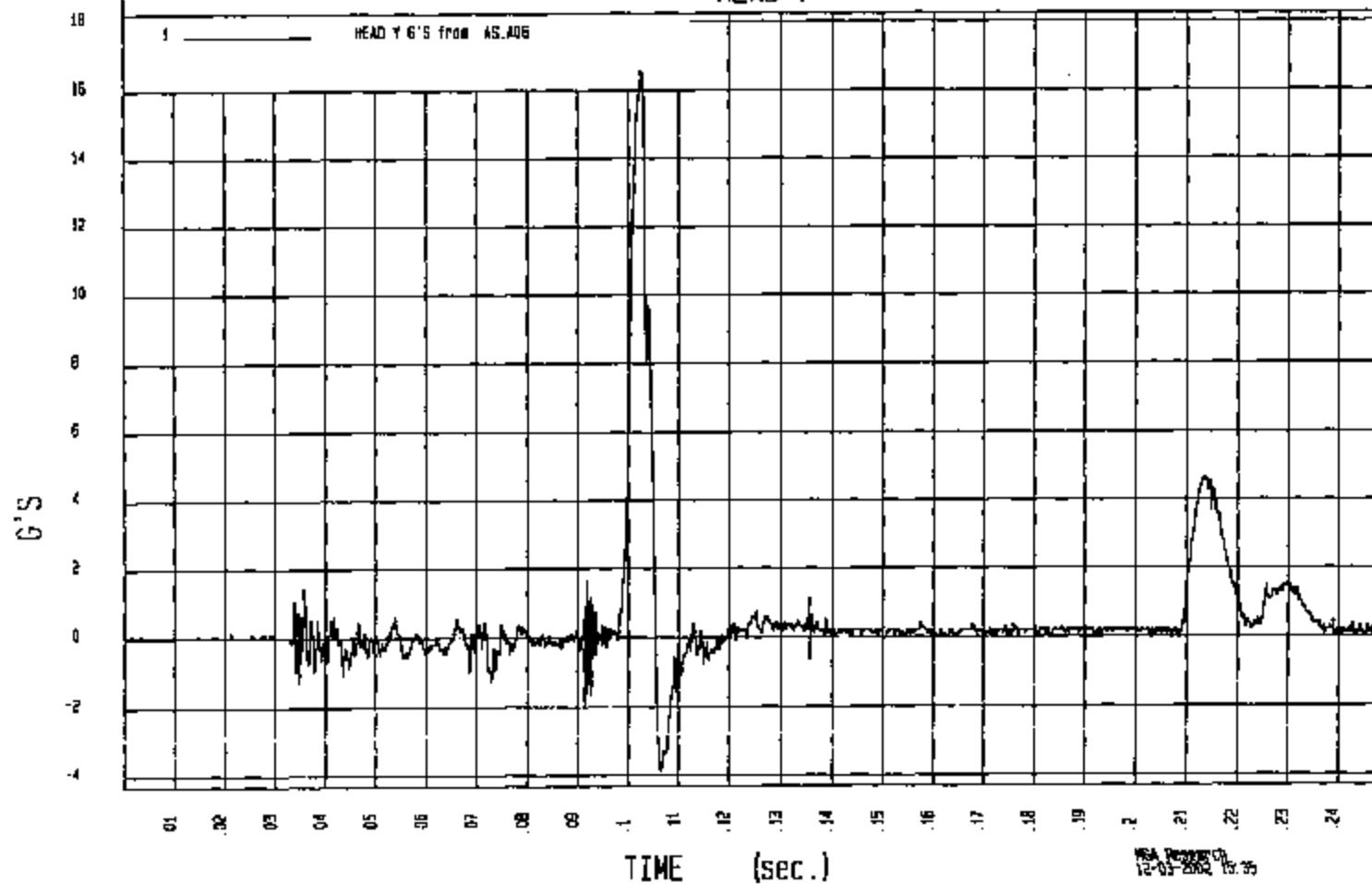
TEST: 2003 Honda Accord FMVSS 2010, G03I5-001.1, 12/3/02

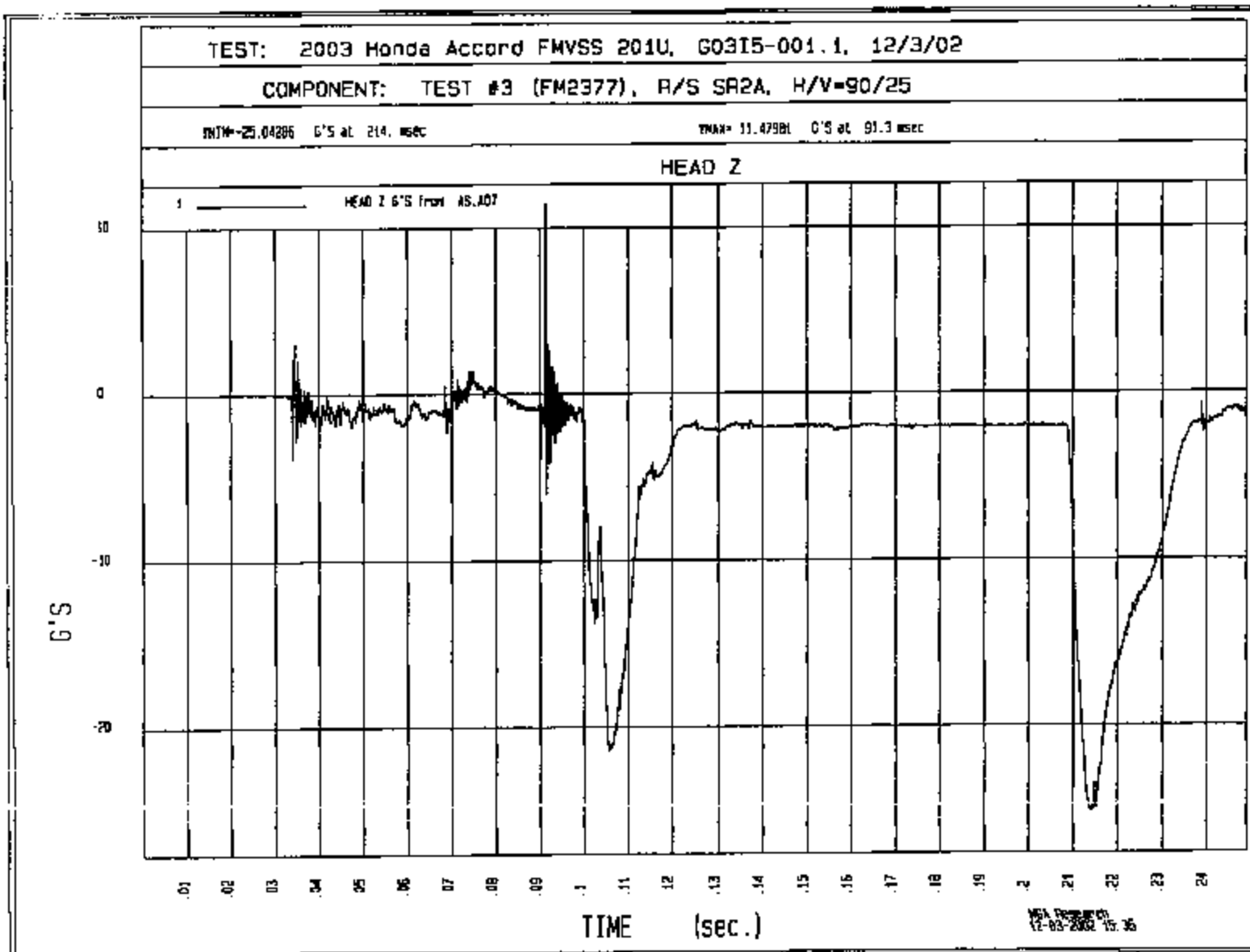
COMPONENT: TEST #3 (FM2377), R/S SR2A, H/V=90/25

WIDM=-3.920354 G'S at 108. msec

TMAX=16.57255 G'S at 102. msec

HEAD Y





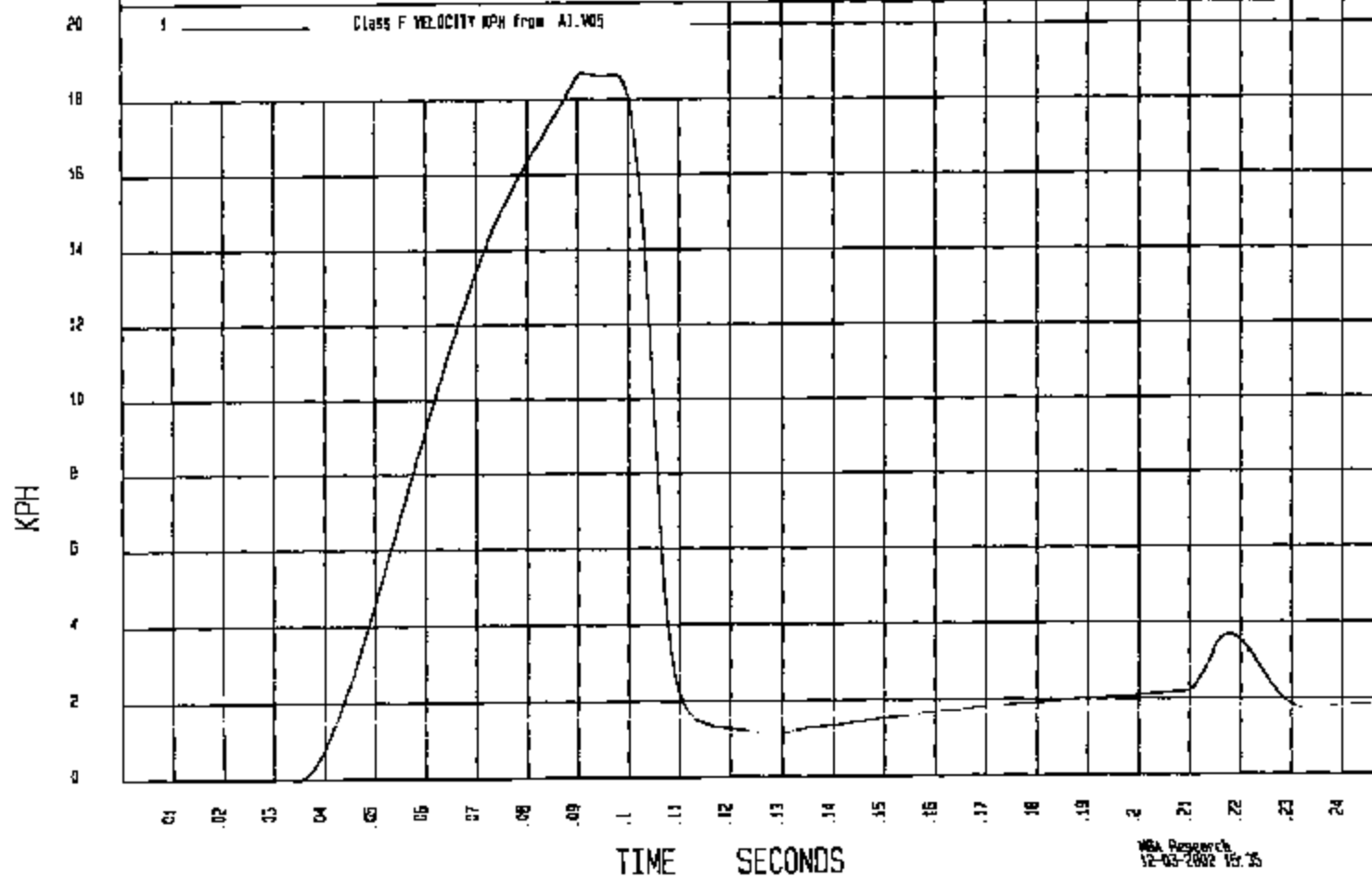
TEST: 2003 Honda Accord FMVSS 2010, G0315-001.1, 12/3/02

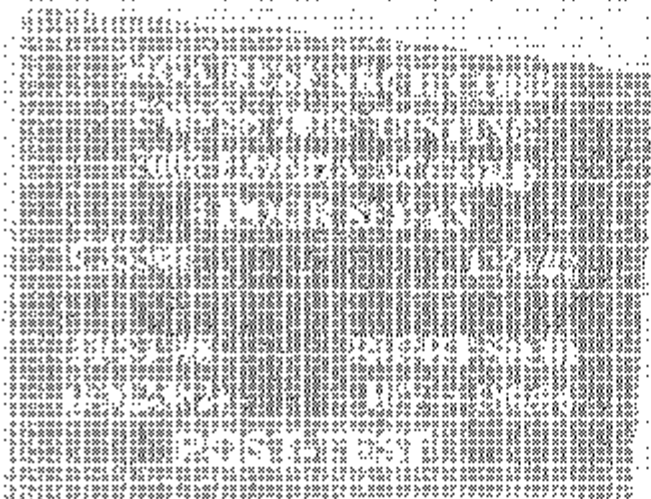
COMPONENT: TEST #3 (FM2377), R/S SR2A, H/V=90/25

YMIN=-1.610154E-02 KPH at 32.6 msec

YMAX=18.71713 KPH at 90.9 msec

VELOCITY





Placard Mislabeled
Horizontal Angle = 90°

ARGA RESERVATION
PM2382
2003 HONDA ACCORD
4 DOOR SEDAN
CZ5301

TEST #8
(PM2382) RIGHT SIDE
10/17/02

POST-TEST

Placed Misaligned
Horizontal Angle = 0.1°

MICHIGAN OPERATIONS
DATE: 10/18/01
SUPERCEDES: MGATP201U_FRAME #2.3

DOC. NO.: MGATP201U_FRAME #2
REVISION NO.: 4
PAGE 9 of 9

SUMMARY OF FMVSS 201U TEST

JOB/NHTSA NO: C35301 VEHICLE YR/MAKE/MODEL: 2003 Honda Accord

GENERAL TEST PARAMETERS:

Test Number: 3

Target (Vehicle Side): left/right SR3B

Temperature: 73 °C

MGA Test Reference No.: FM238L

Humidity: 22 %

Approach Angles: Horizontal 90 °

Time of Test: 1:24 am/pm

Vertical 36 °

FMH Serial No: 36

TEST RESULTS:

HIC(d)	HIC	Δt (msec)	Velocity (kph)	Impact location on FMH (mm)	
				Above Pt. O	Left/Right Pt. O
371	271	7.4	18.7	23	0

INSTRUMENTATION INFORMATION: (all accelerometers are Endevco 7264-2000)

Axis	Channel	Serial No.	DLR Value	ΔV Pre-Test	ΔV Post-Test
X	5	J35923	100.9	1.21	1.21
Y	6	J35916	100.7	1.23	1.23
Z	7	J35918	100.3	1.51	1.51

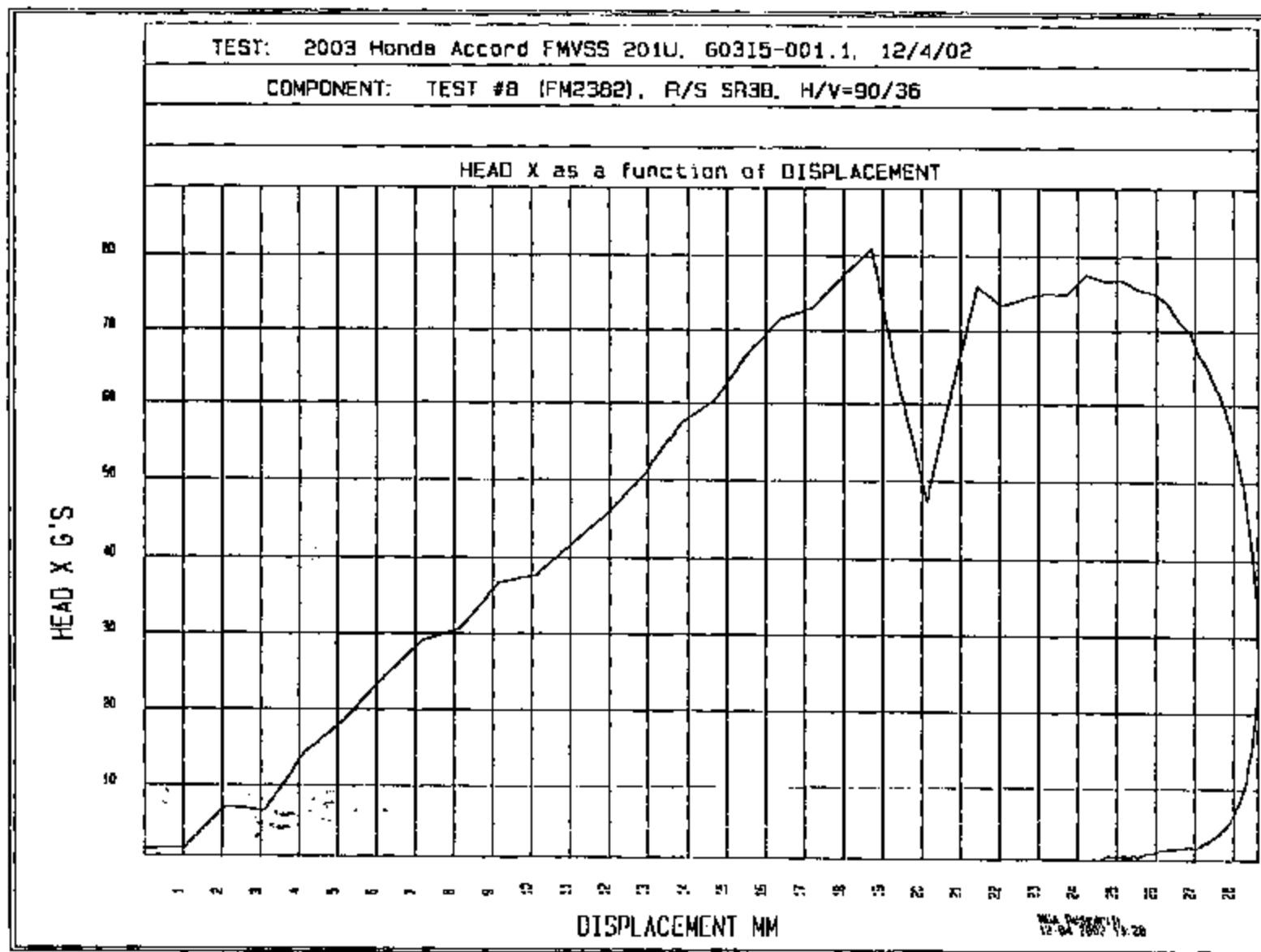
REMARKS (Summary of test, damage, non-compliance, invalid test, etc.):

NO VISIBLE DAMAGE -

Recorded By: [Signature] Approved By: [Signature] Date: 12/4/02

*Only necessary for NHTSA (Government) Compliance testing.

```
*****
RESULTS OF HIC36 PROGRAM
*****
The input file is \NHTSA\FM2382AV.A05
HIC = 270.83 calculated over 7.4 msec
T1 = 1.99 msec T2 = 9.36 msec
*****
HIC(d) = 371
Impact Velocity = 18.7 (kph)
```



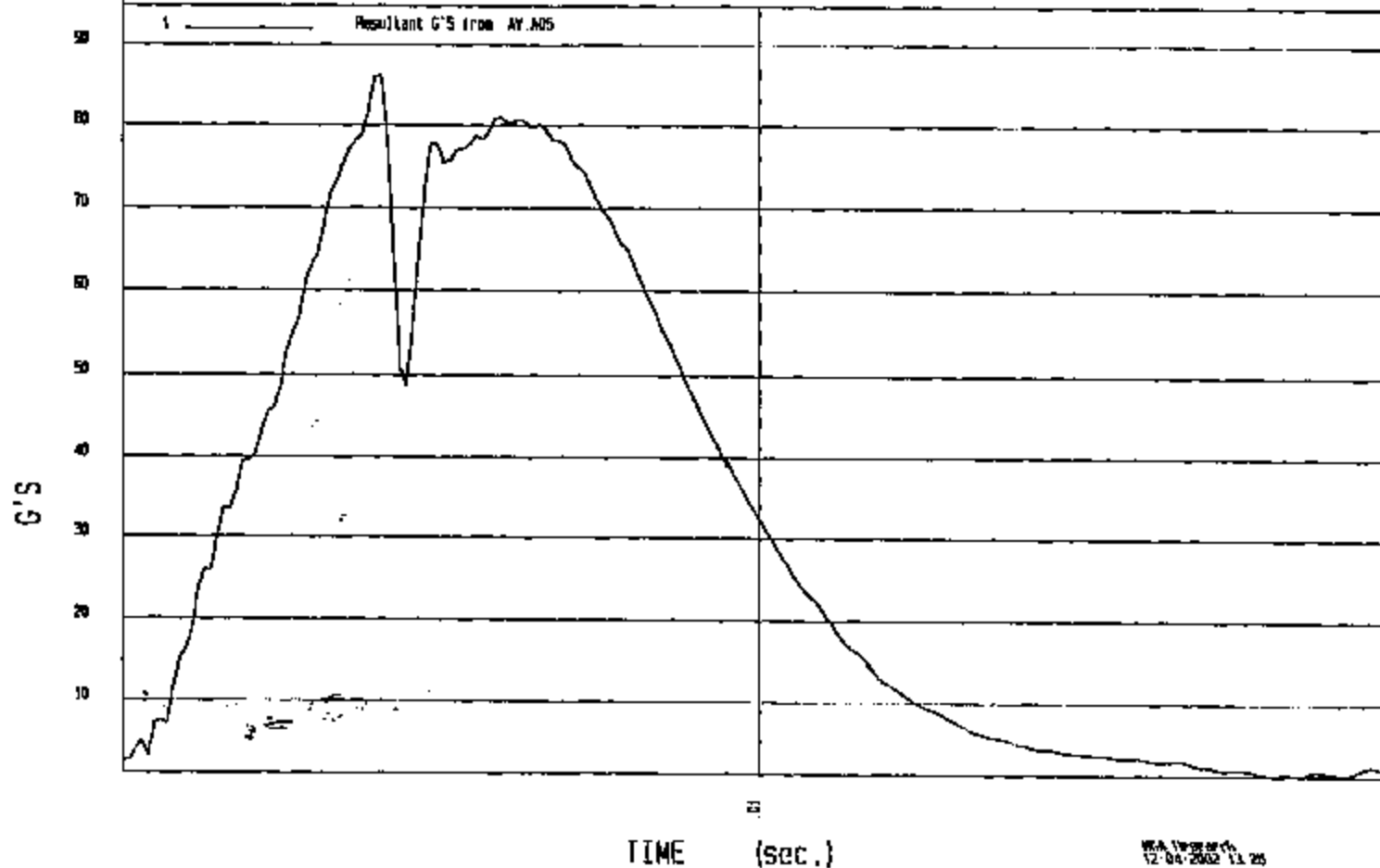
TEST: 2003 Honda Accord FMVSS 201U, G0315-001.1, 12/4/02

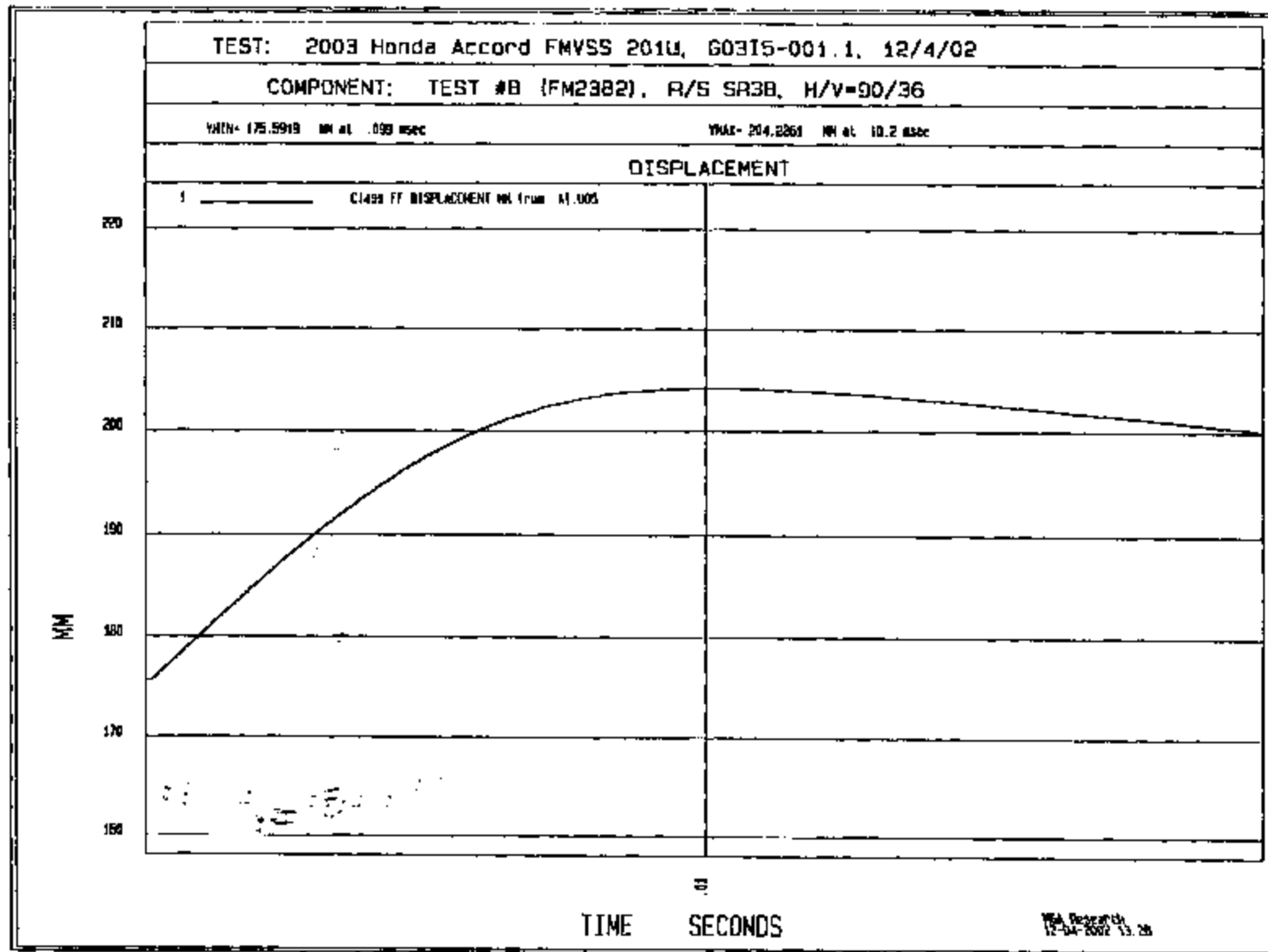
COMPONENT: TEST #B (FM2382), P/S SR3B, H/V-90/36

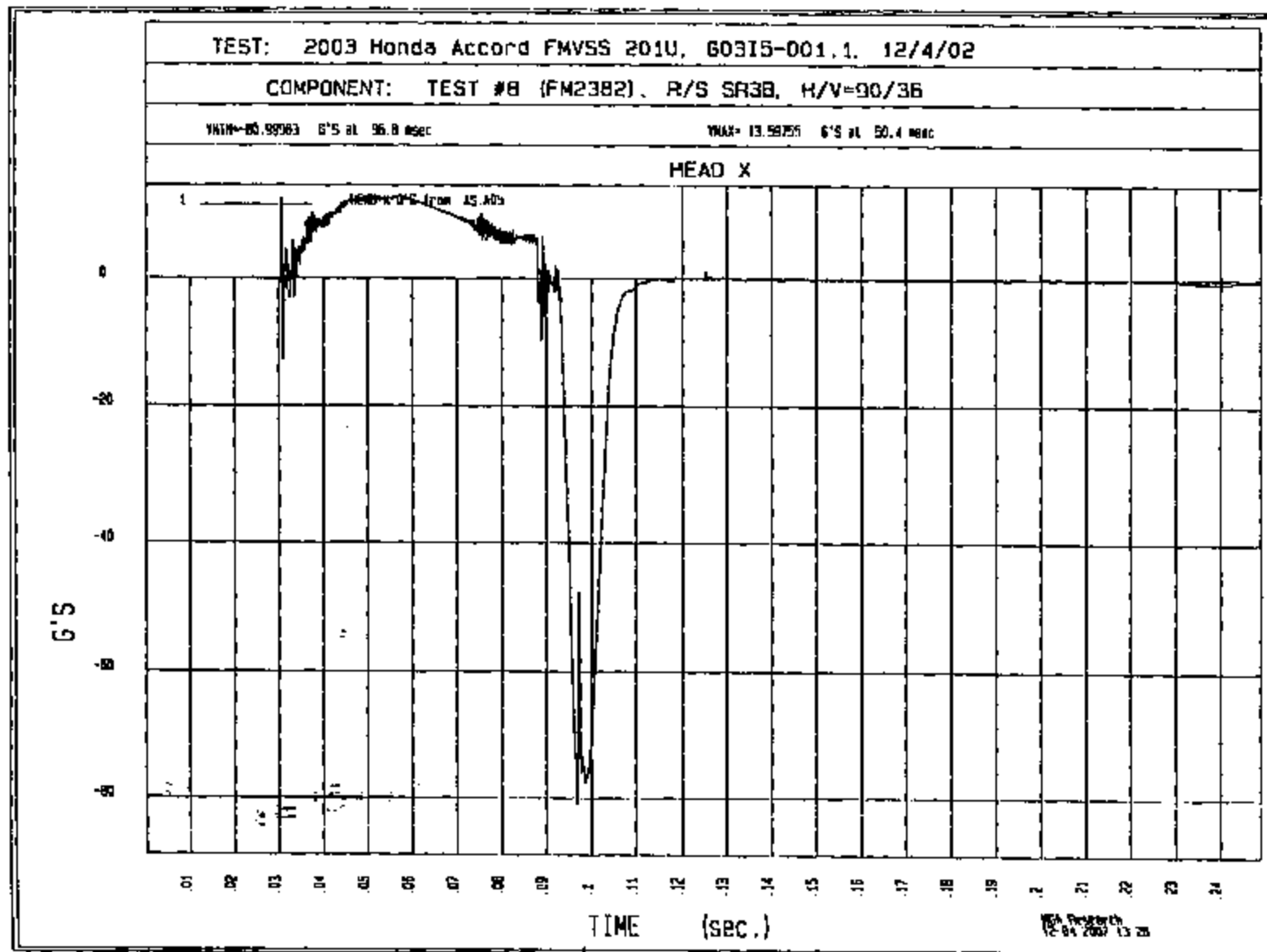
YMIN= .5447745 G'S at 18.4 msec

YMAX= 88.24852 G'S at 4.08 msec

FMM RESULTANT







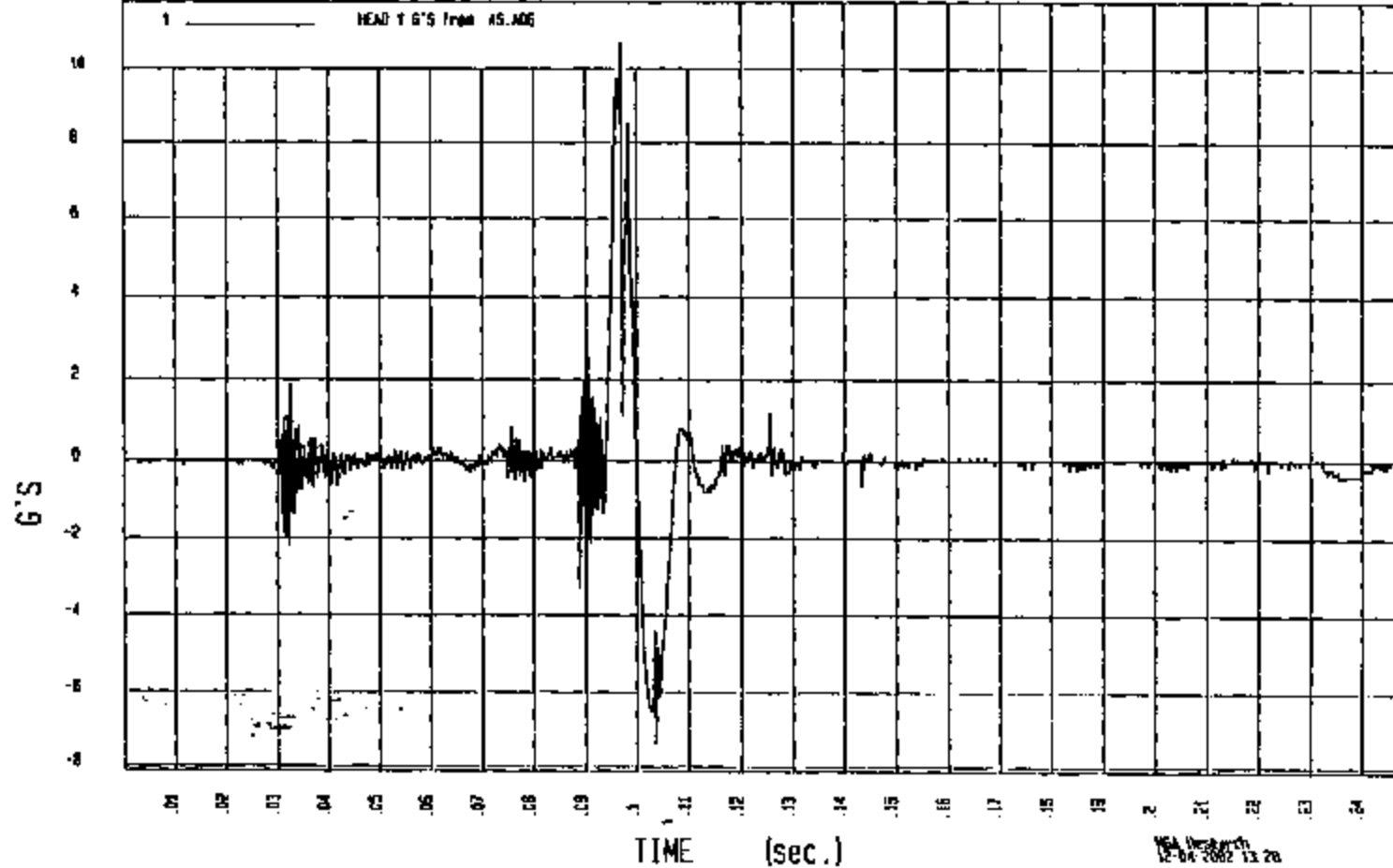
TEST: 2003 Honda Accord FMVSS 201U, G0315-001.1, 12/4/02

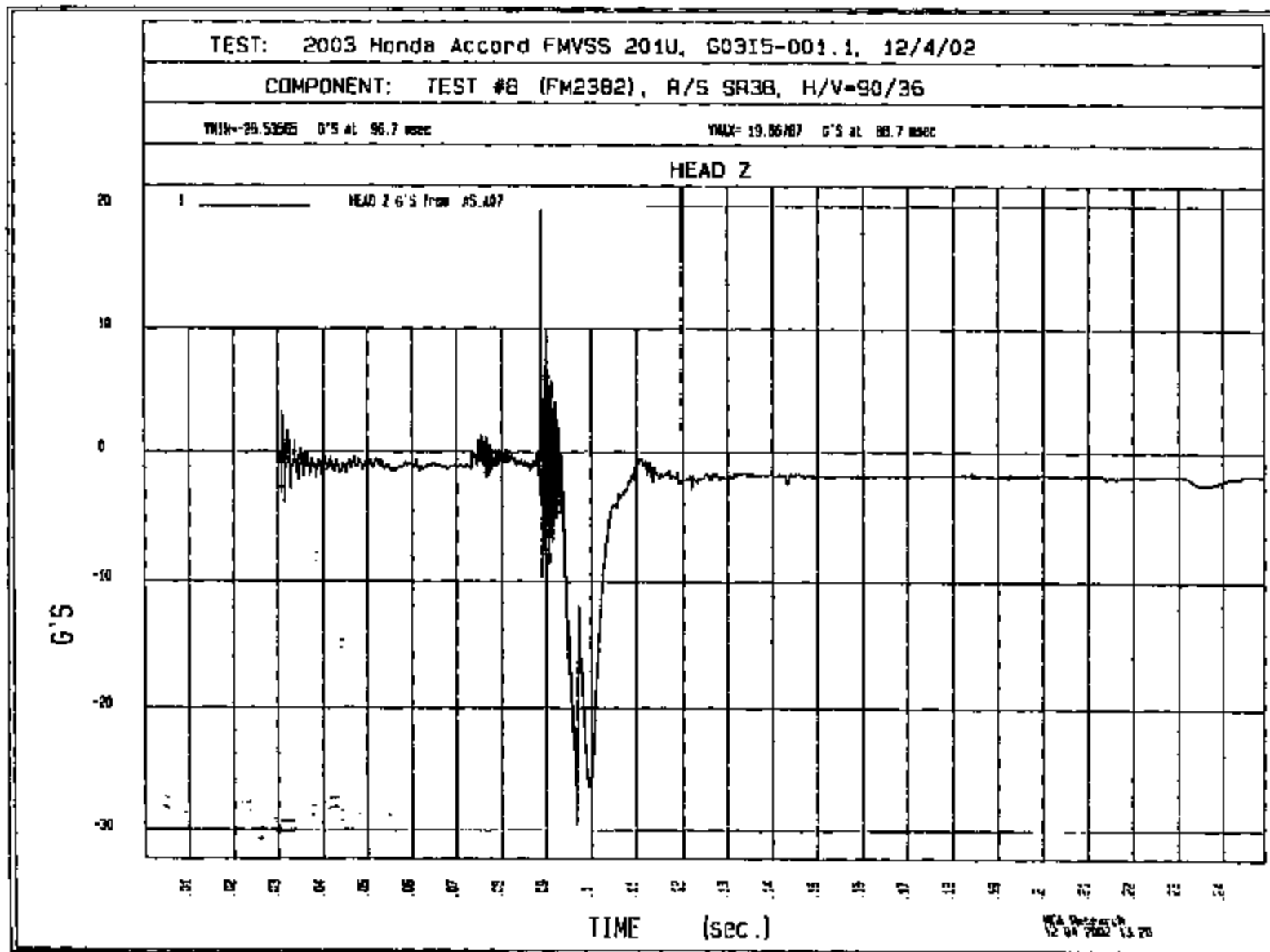
COMPONENT: TEST #B (FM2382), R/S SR3B, H/V=90/36

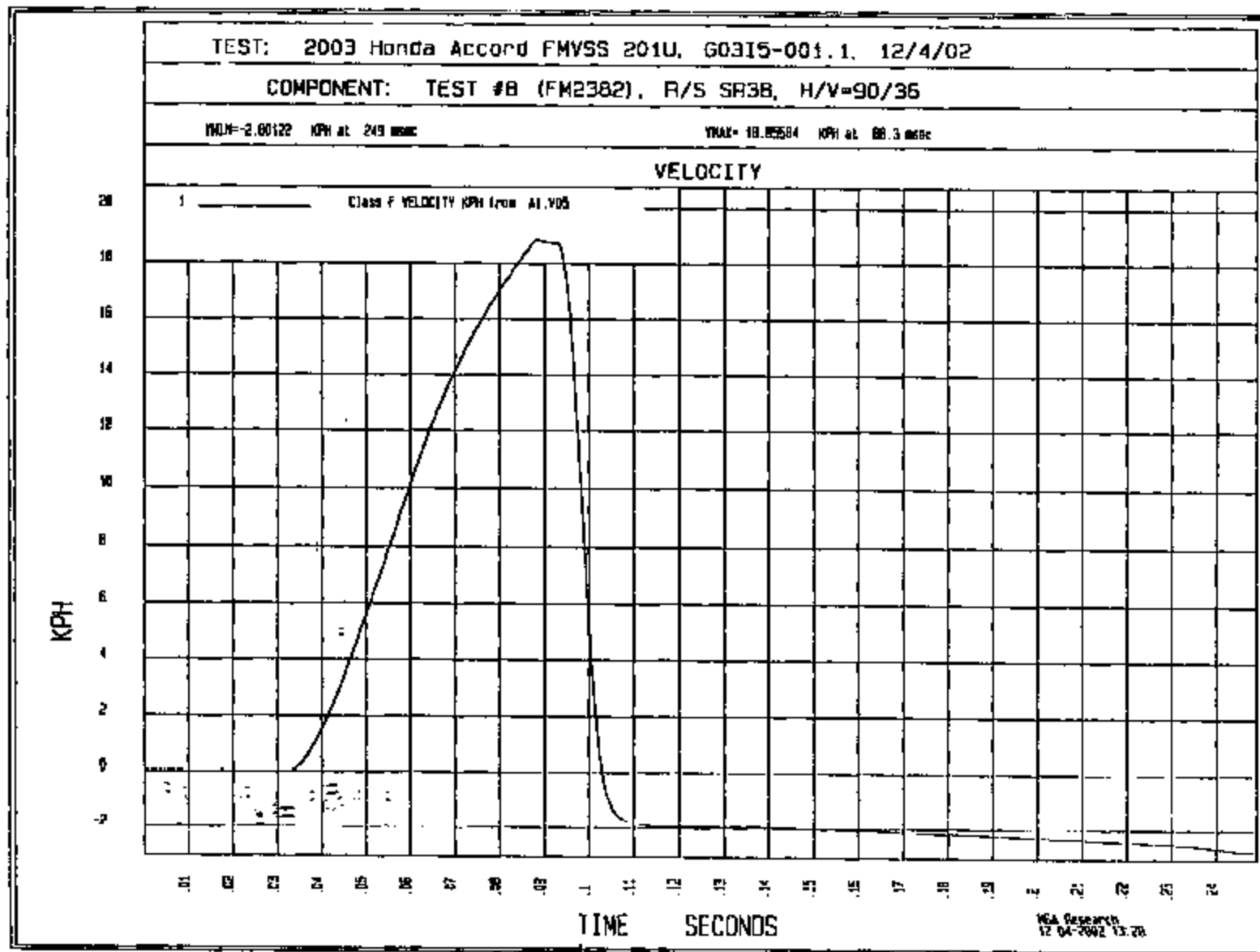
YMIN=-7.376421 G'S at 103. msec

YMAX=10.706165 G'S at 96.8 msec

HEAD Y







MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

12/3/02

TEST #2
(FM2376)

RIGHT UR2
HV = 90/36

PRE-TEST

MCA RESIDENTIAL CORP
MASS 2011 TESTING
2002 HONDA ACCORD
4 DOOR SEDAN

CJ5101

12/3/02

TEST #2

RIGHT UR1

(FM3376)

H/V = 90/36

POST-TEST

MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

12/3/02

TEST #2
(FM2376)

RIGHT UR2
H/V ~ 90/36

POST-TEST

MICHIGAN OPERATIONS
DATE: 10/18/01
SUPERCEDES: MGATP201U_FRAME #2.3

DOC. NO.: MGATP201U_FRAME #2
REVISION NO.: 4
PAGE 9 of 9

SUMMARY OF FMVSS 201U TEST

JOB/NHTSA NO: C35301 VEHICLE YR/MAKE/MODEL: 2003 Honda Accord

GENERAL TEST PARAMETERS:

Test Number: 2

Target (Vehicle Side): left/right UL2

Temperature: 73 °F °C

MGA Test Reference No.: FM2376

Humidity: 22 %

Approach Angles: Horizontal 90 °

Time of Test: 2:57 am/pm

Vertical 36 °

FMH Serial No: 36

TEST RESULTS:

HIC(d)	HIC	Δt (msec)	Velocity (kph)	Impact location on FMH (mm)	
				Above Pt. O	Left/Right Pt. O
713	731	7.3	23.4	61	2

INSTRUMENTATION INFORMATION: (all accelerometers are Endevco 7264-2000)

Axis	Channel	Serial No.	DLR Value	ΔV Pre-Test	ΔV Post-Test
X	5	J35923	-100.9	1.21	1.21
Y	6	J35916	100.7	1.23	1.23
Z	7	J25918	100.8	1.51	1.51

REMARKS (Summary of test, damage, non-compliance, invalid test, etc.):

NO VISIBLE DAMAGE

Recorded By: [Signature] Approved By*: [Signature] Date: 12/3/02

*Only necessary for NHTSA (Government) Compliance testing.

RESULTS OF HIC36 PROGRAM

The input file is \NHTSA\FM2376AV.A05

HIC = 731.10 calculated over 7.3 msec

T1 = 4.68 msec T2 = 11.95 msec

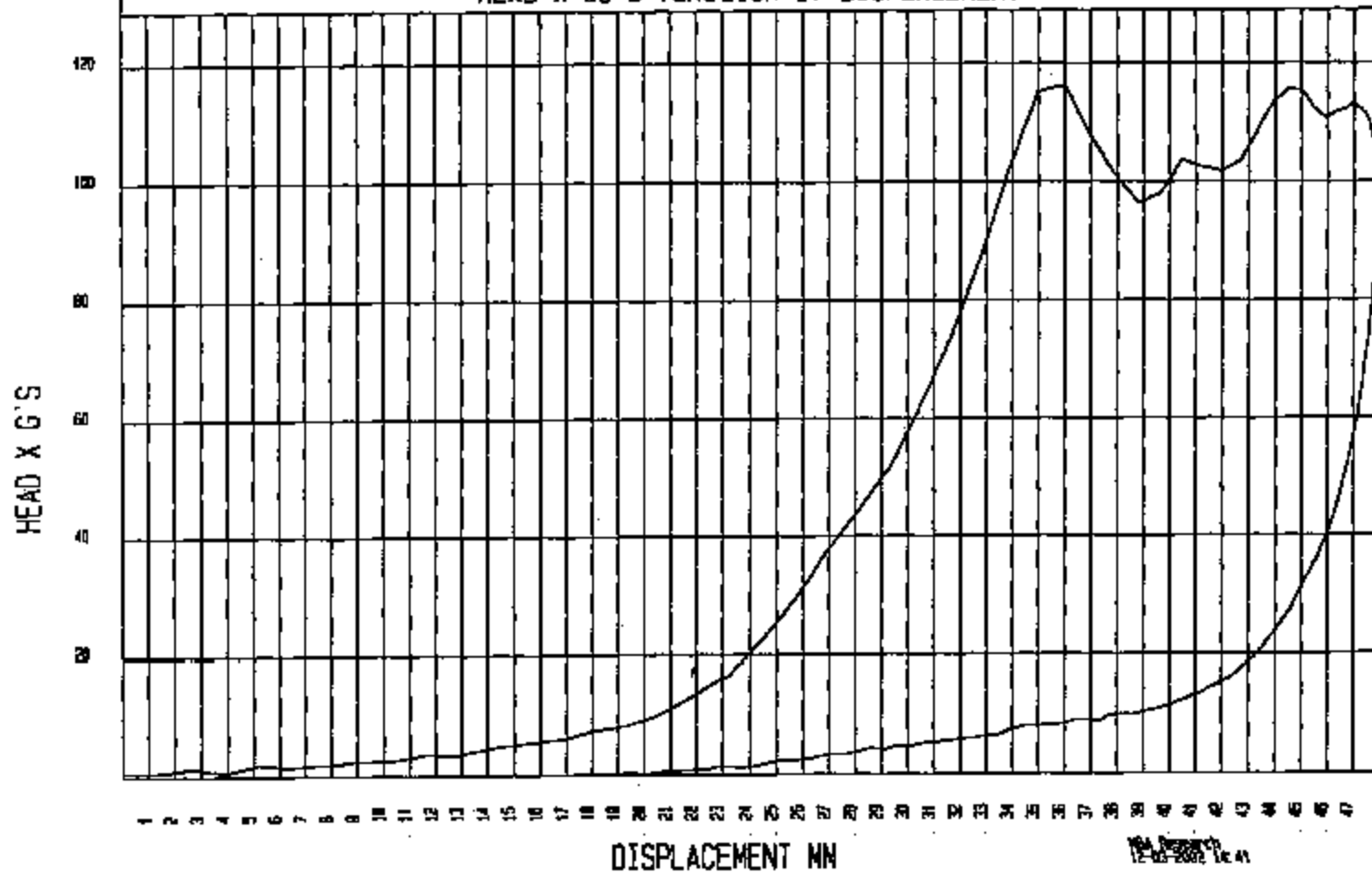
HIC(d) = 718

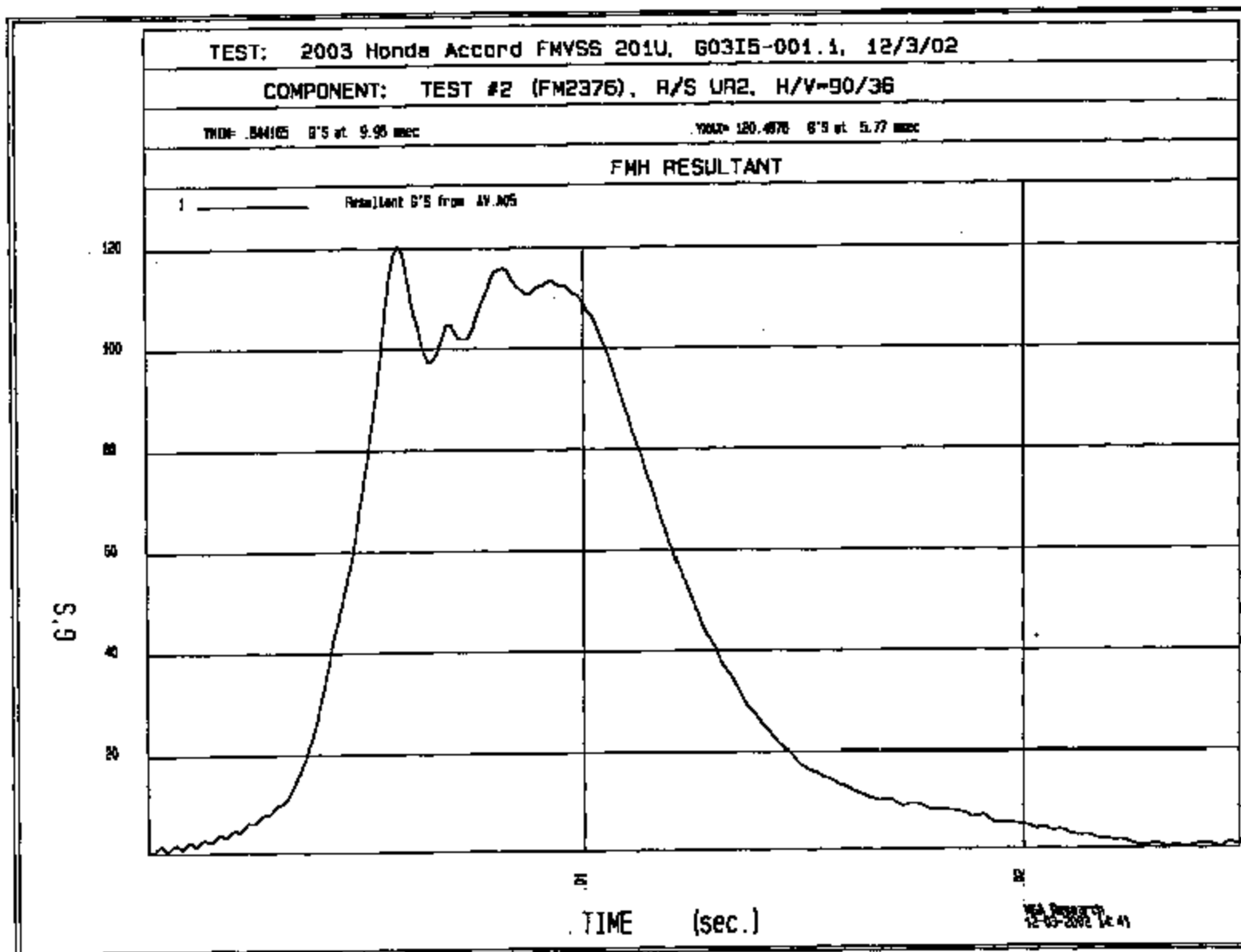
Impact Velocity = 23.4 (kph)

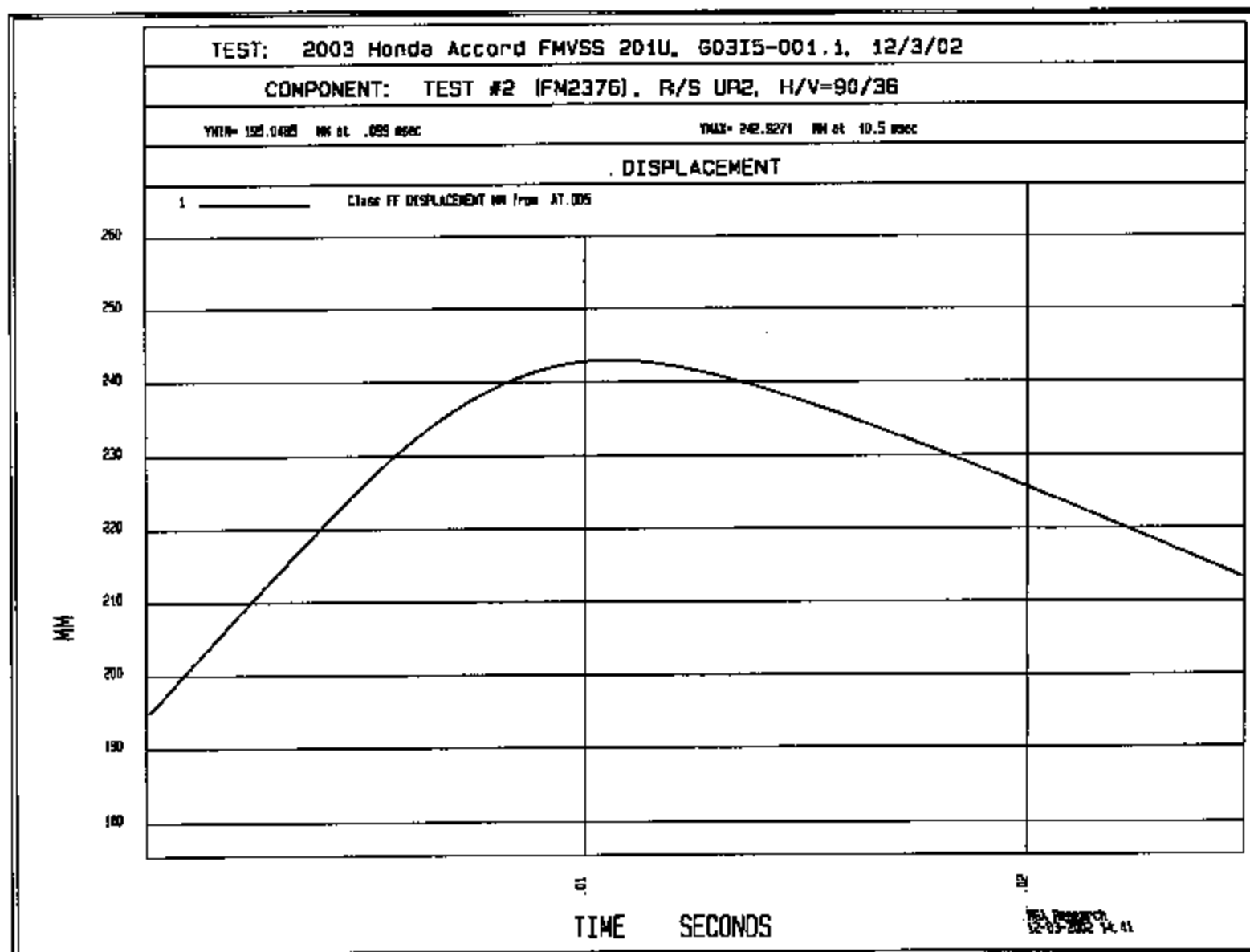
TEST: 2003 Honda Accord FMVSS 2010, G0315-001.1, 12/3/02

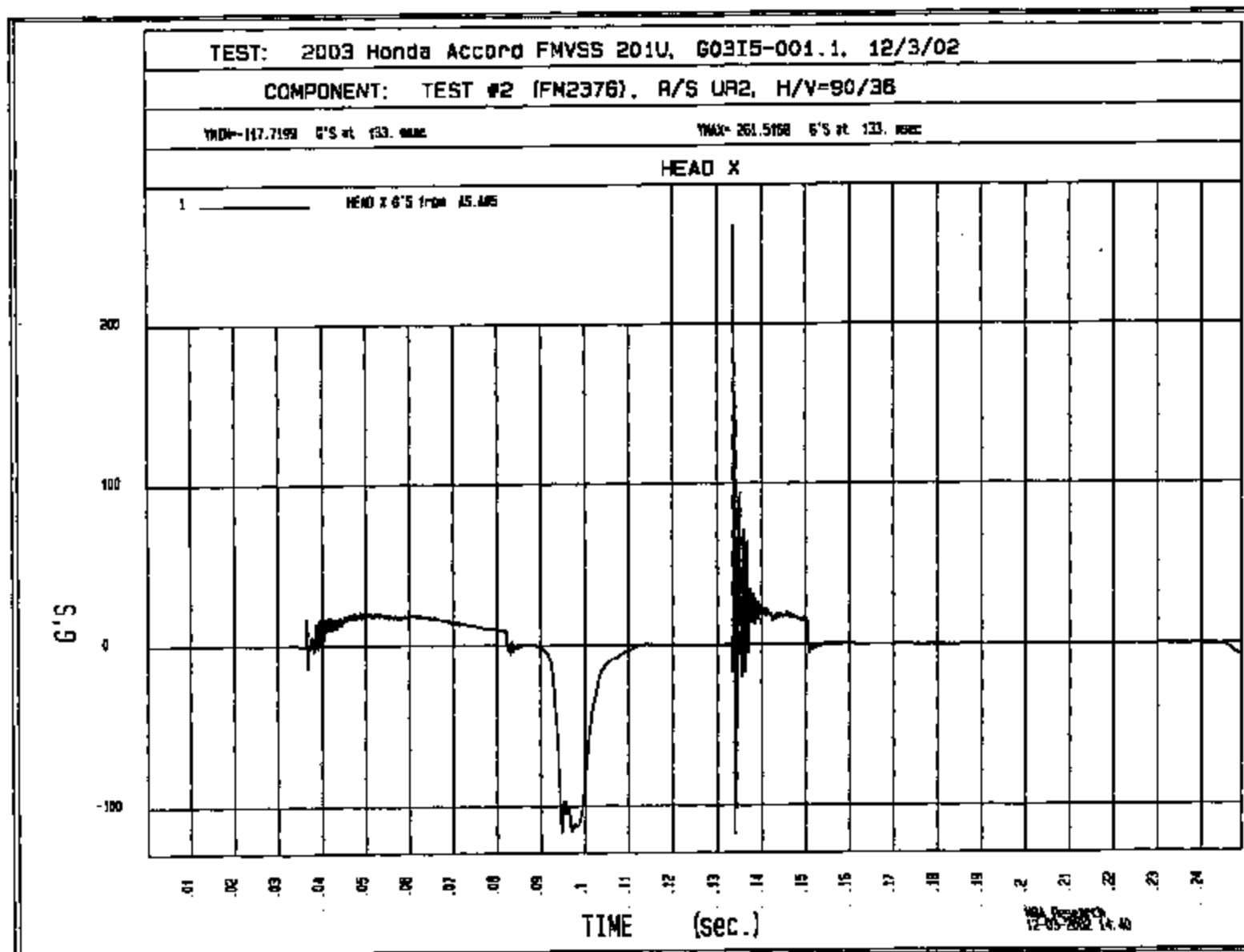
COMPONENT: TEST #2 (FM2376), R/S UR2, H/V=90/36

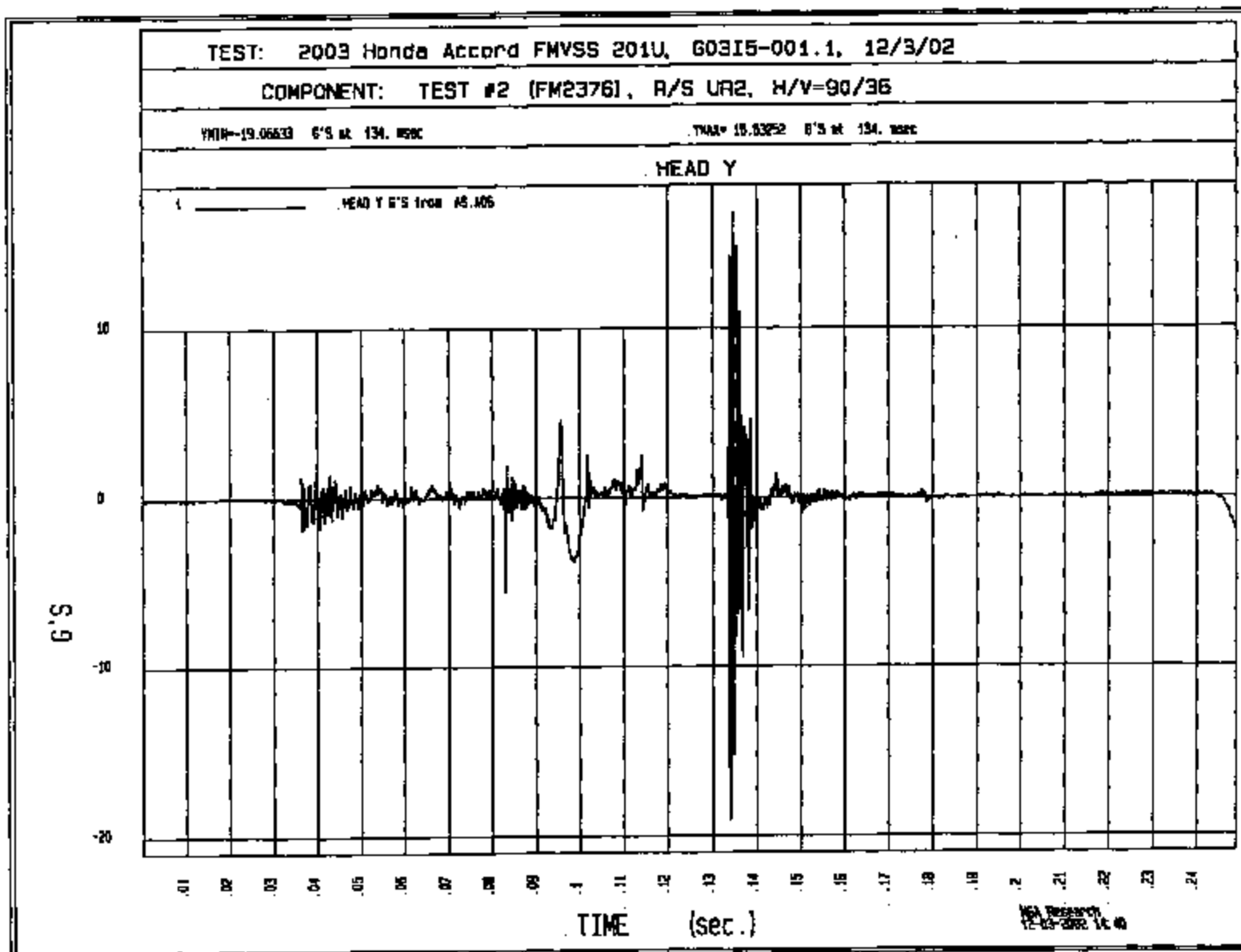
HEAD X as a function of DISPLACEMENT

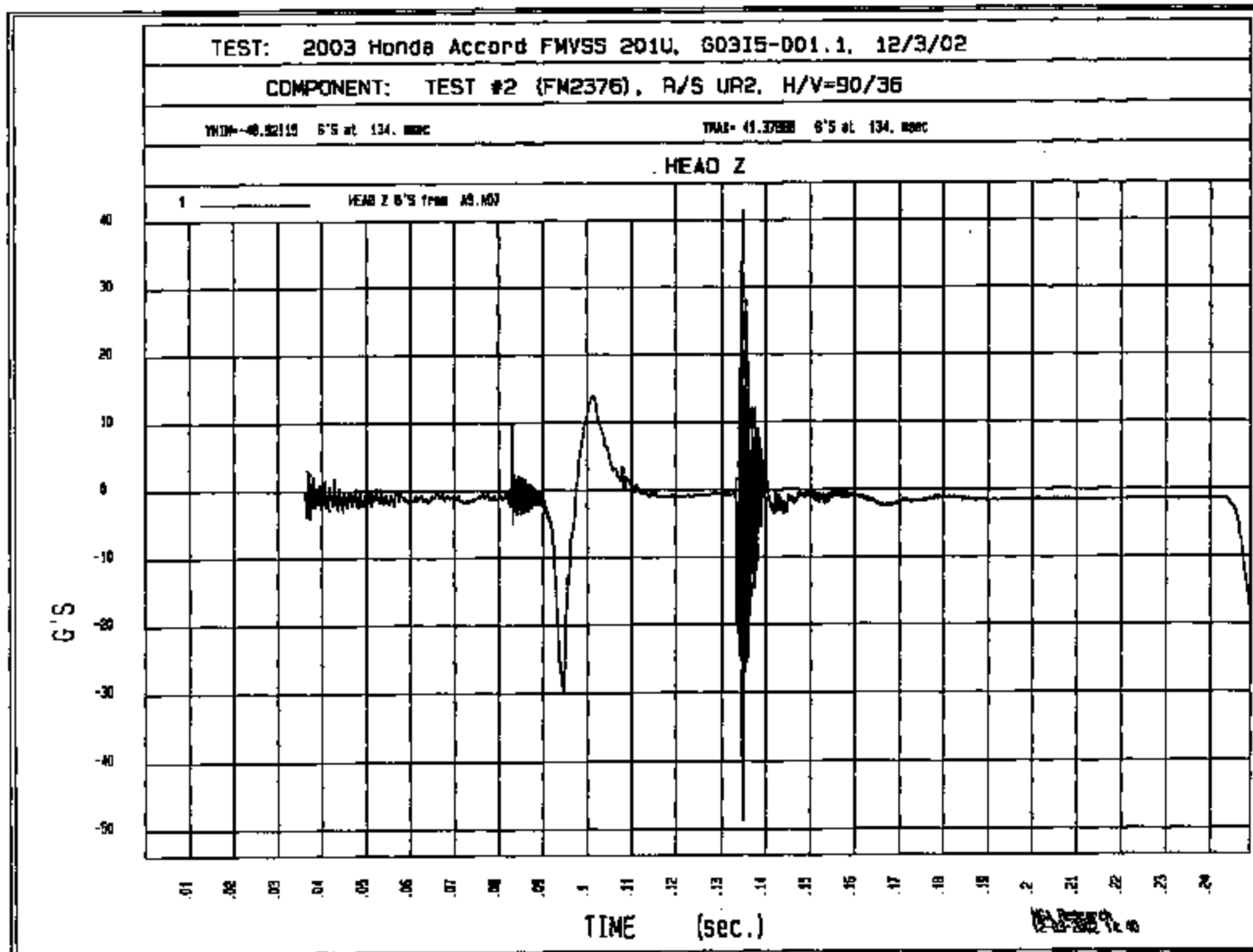


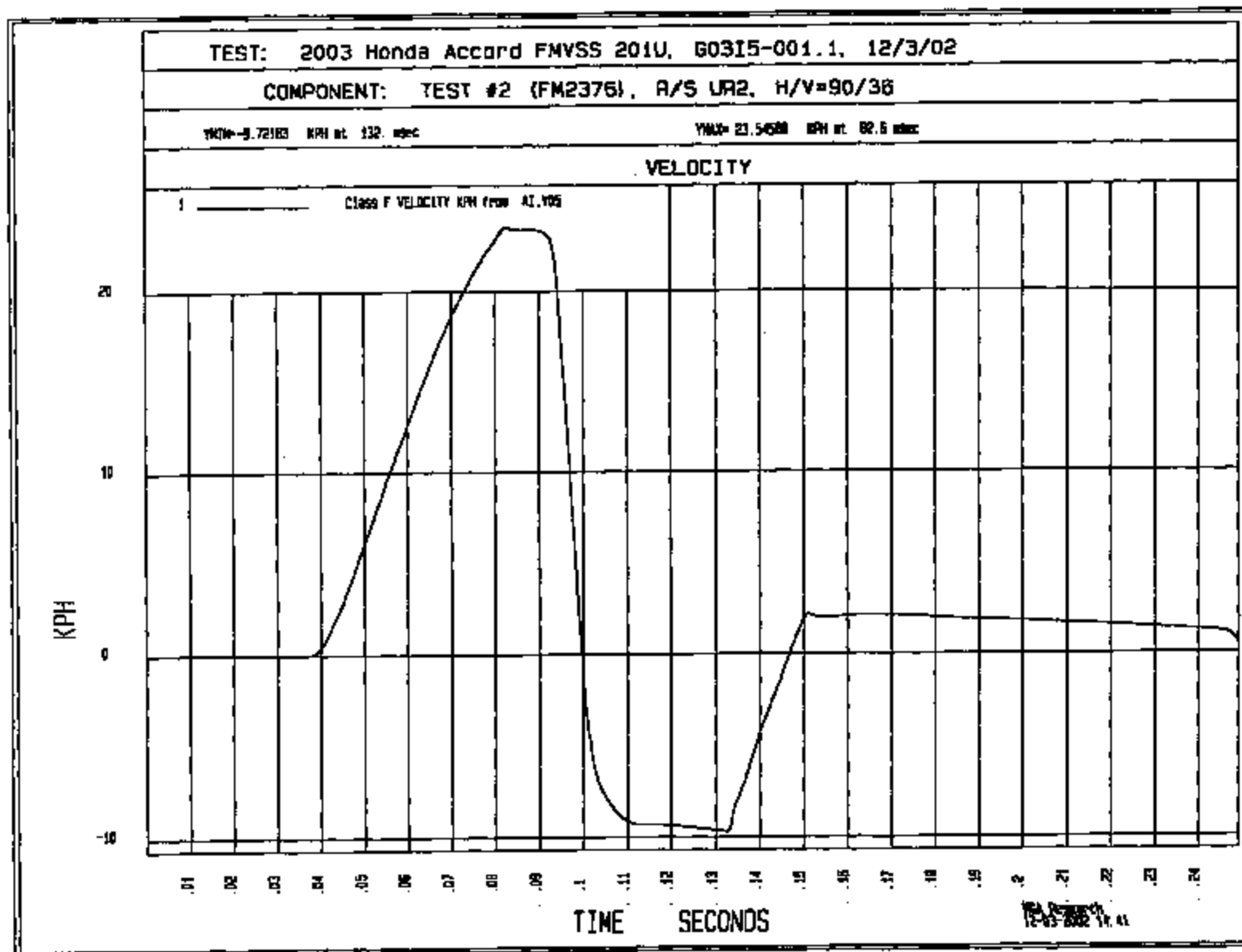












MGA RESEARCH CORP
EMVSS 2010 TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

11/4/02

TEST #7

RIGHT TURN

(FM2381)

H/V at 90/50

PRE-TEST

MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

12/10/02

TEST #7
(FM2381)

RIGHT URJ
H/V = 90/50

POST-TEST

MICHIGAN OPERATIONS
DATE: 10/18/01
SUPERCEDES: MOATP201U_FRAME#23

DOC. NO.: MGATP201U_FRAME #2
REVISION NO.: 4
PAGE 9 of 9

SUMMARY OF FMVSS 201U TEST

JOB/NHTSA NO: C35301 VEHICLE YR/MAKE/MODEL: 2003 Honda Accord

GENERAL TEST PARAMETERS:

Test Number: 7

Target (Vehicle Side): left/right UA3

Temperature: 73 °C

MGA Test Reference No.: FM23E1

Humidity: 22 %

Approach Angles: Horizontal 90 °

Time of Test: 10:20 am/pm

Vertical 50 °

FMH Serial No: 35

TEST RESULTS:

HIC(d)	HIC	Δt (msec)	Velocity (kph)	Impact location on FMH (mm)	
				Above Pt. O	(Left/Right Pt. O
495	436	11.2	28.9	31	2

INSTRUMENTAION INFORMATION: (all accelerometers are Endevco 7264-2000)

Axis	Channel	Serial No.	DLR Value	ΔV Pre-Test	ΔV Post-Test
X	5	J35924	-93.1	1.21	1.21
Y	6	J35919	95.3	1.23	1.23
Z	7	J31051	95.1	1.51	1.51

REMARKS (Summary of test, damage, non-compliance, invalid test, etc.):

NO VISIBLE DAMAGE

Recorded By: [Signature] Approved By: [Signature] Date: 12/4/02

*Only necessary for NHTSA (Government) Compliance testing.

RESULTS OF HIC36 PROGRAM

The input file is \NHTSA\FM2381AV.A05

HIC = 435.92 calculated over 11.6 msec

T1 = 1.89 msec T2 = 13.65 msec

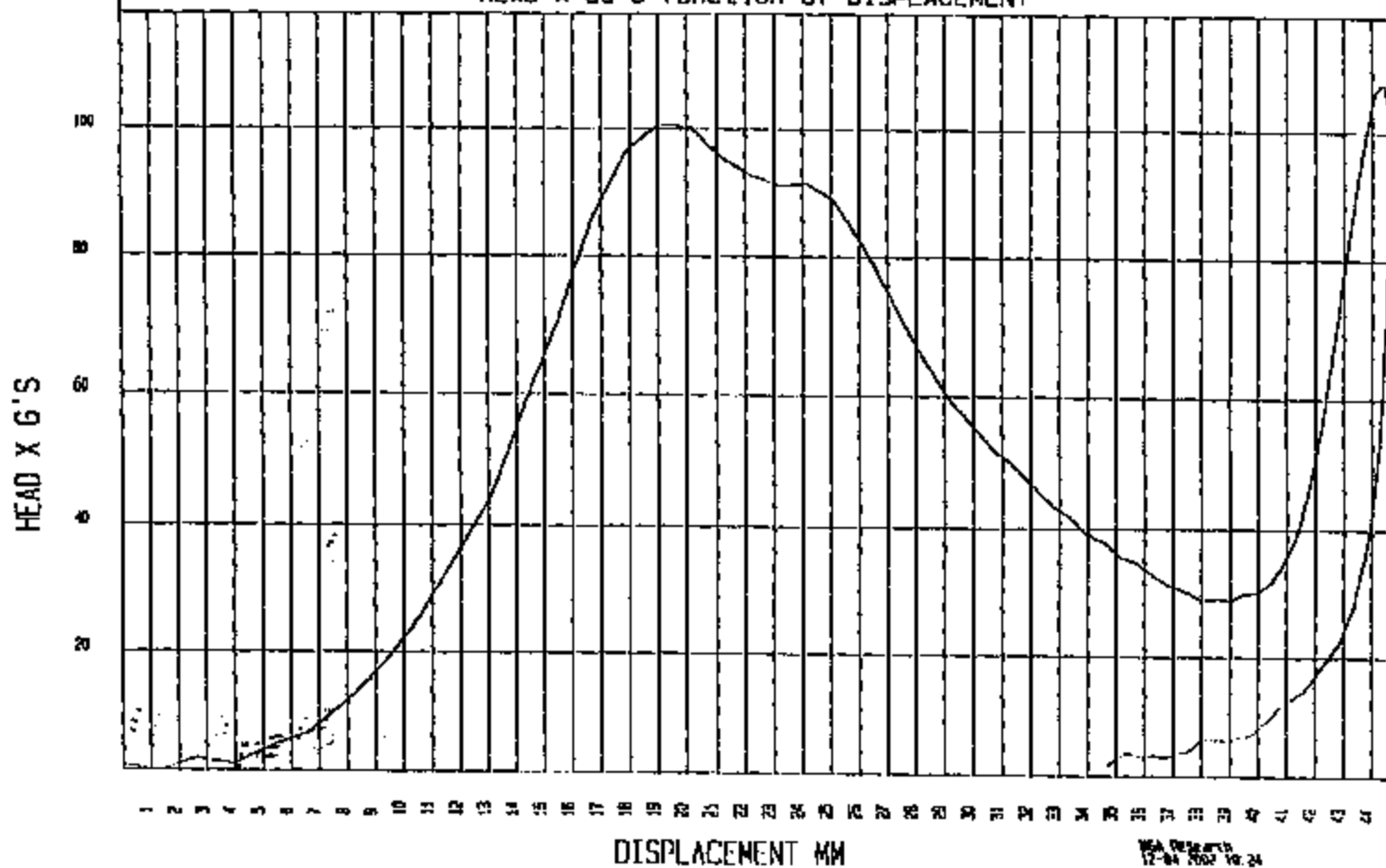
HIC(d) = 495

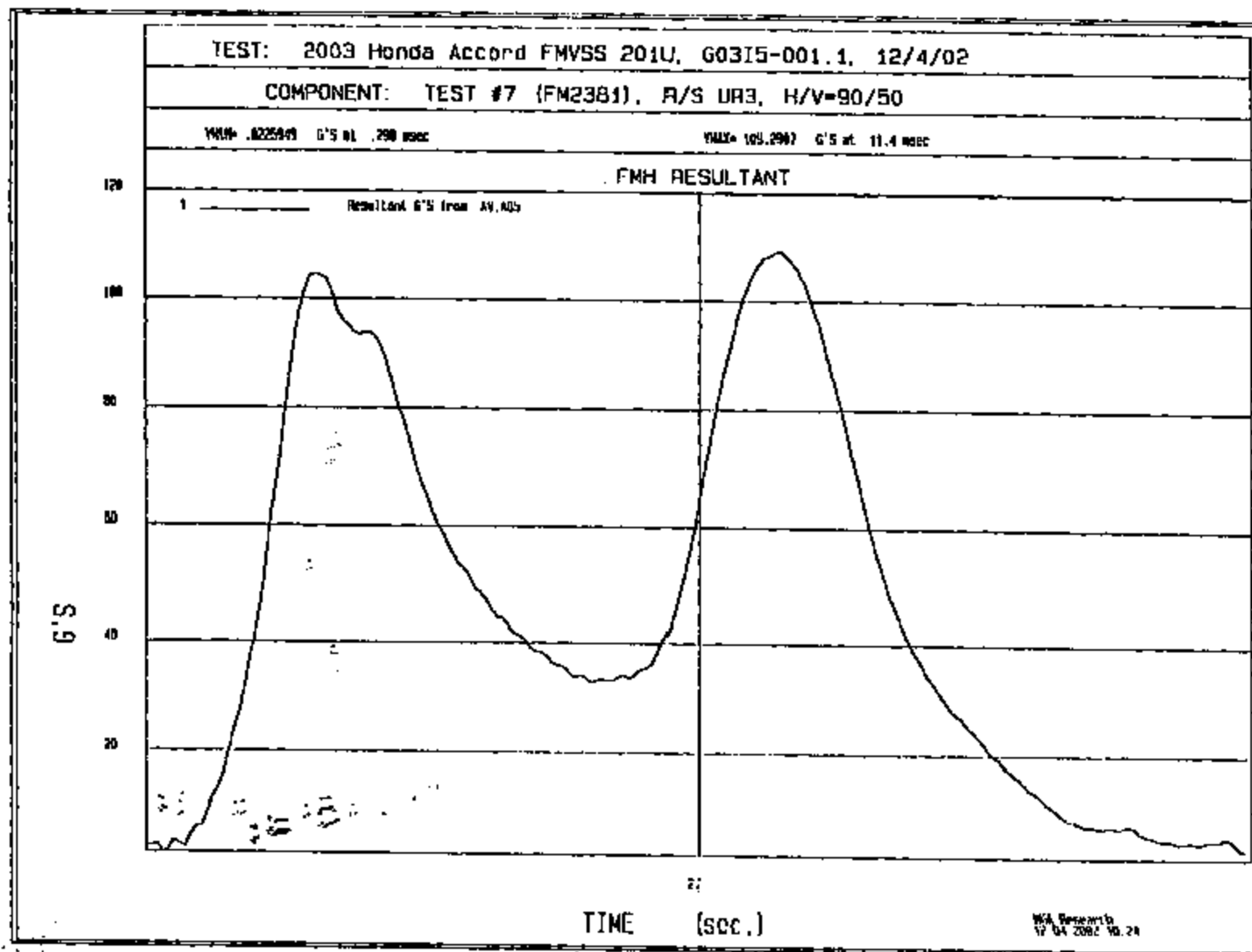
Impact Velocity = 23.8 (kph)

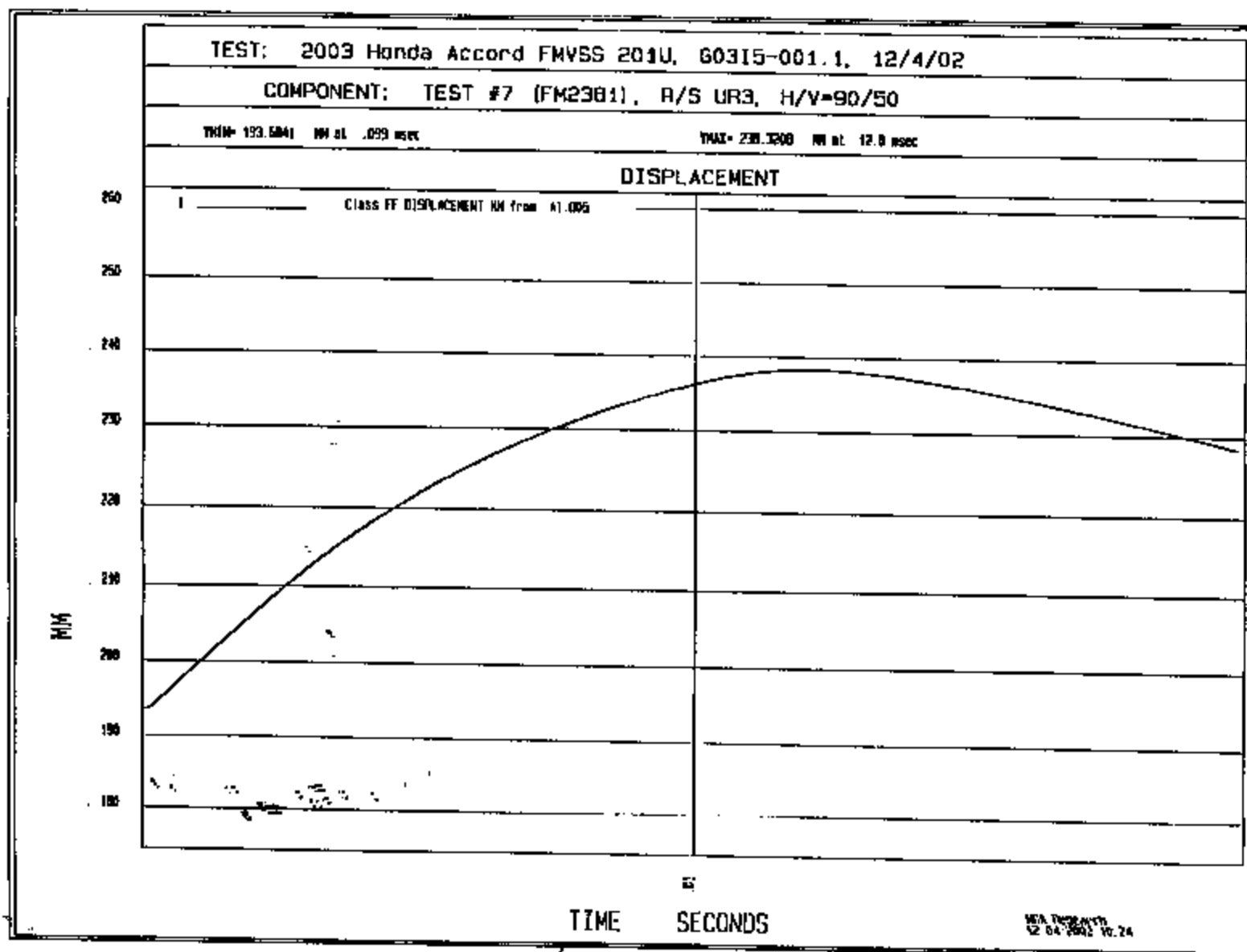
TEST: 2003 Honda Accord FMVSS 2010, G0315-001.1, 12/4/02

COMPONENT: TEST #7 (FM23B1), R/S UR3, H/V=90/50

HEAD X as a function of DISPLACEMENT







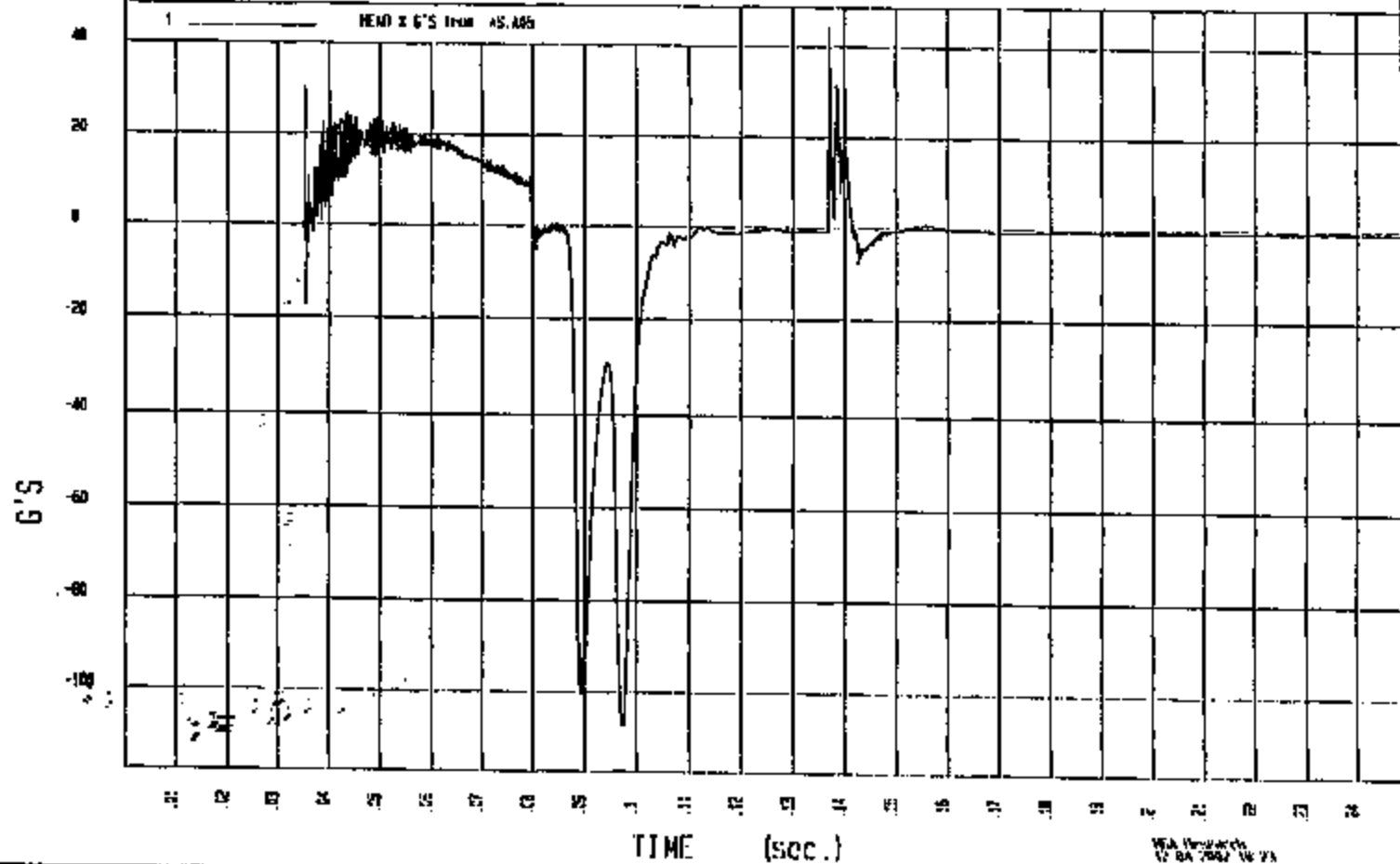
TEST: 2003 Honda Accord FMVSS 201U, G03I5-001.1, 12/4/02

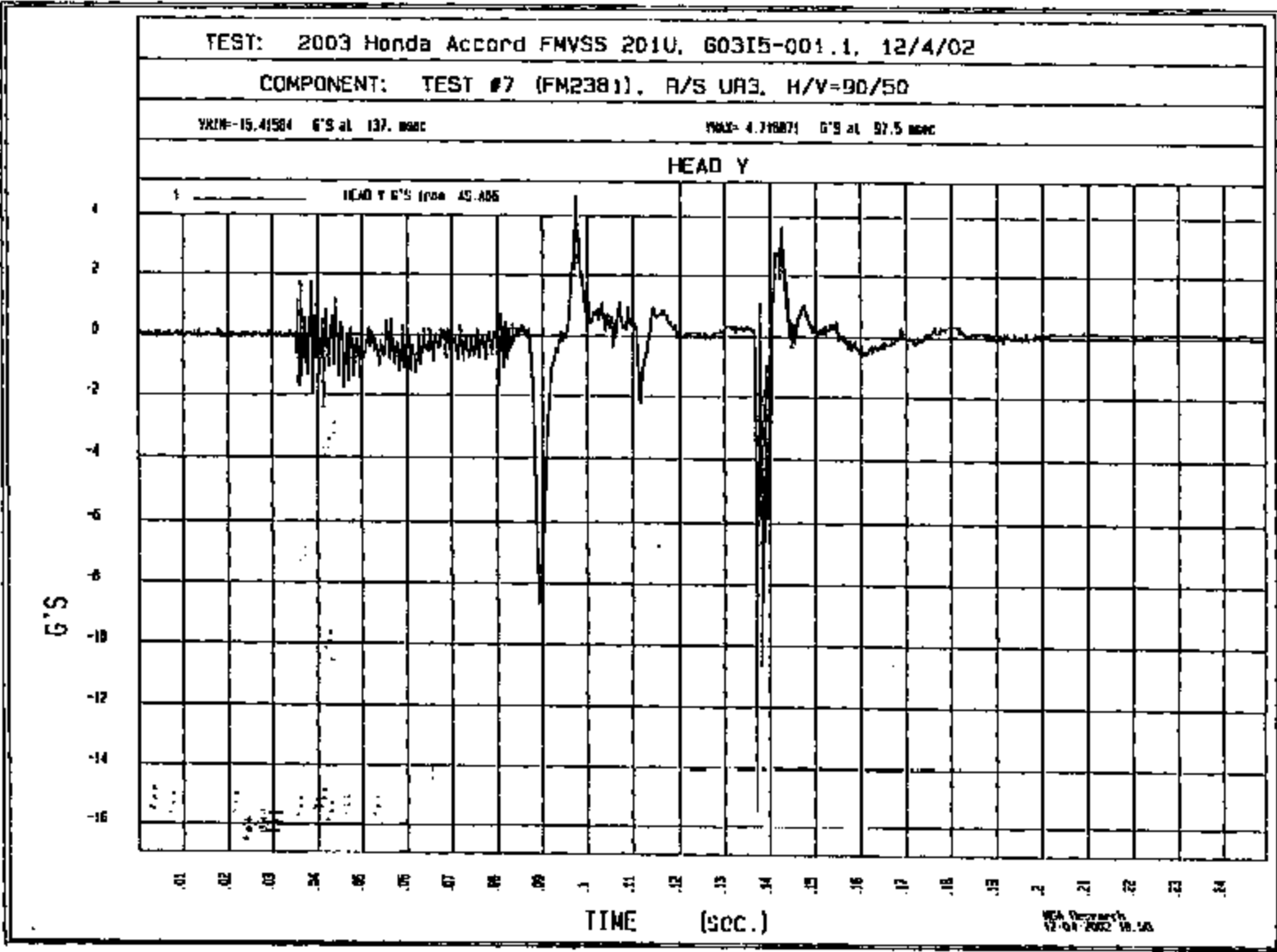
COMPONENT: TEST #7 (FM23B1), R/S UR3, H/V=90/50

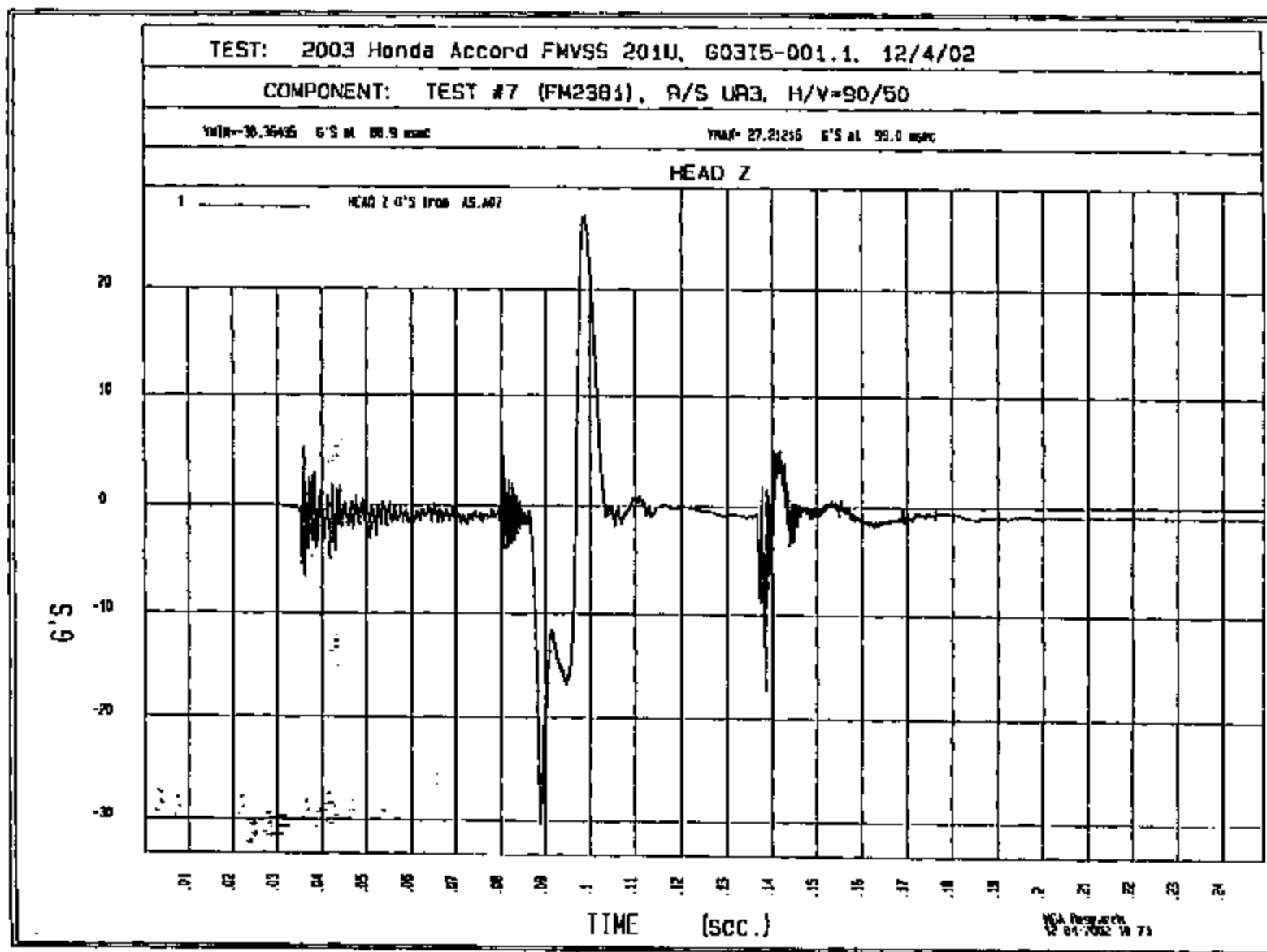
YMIN=-100 G'S at 97.4 msec

YMAX= 46.38136 G'S at 137. msec

HEAD X





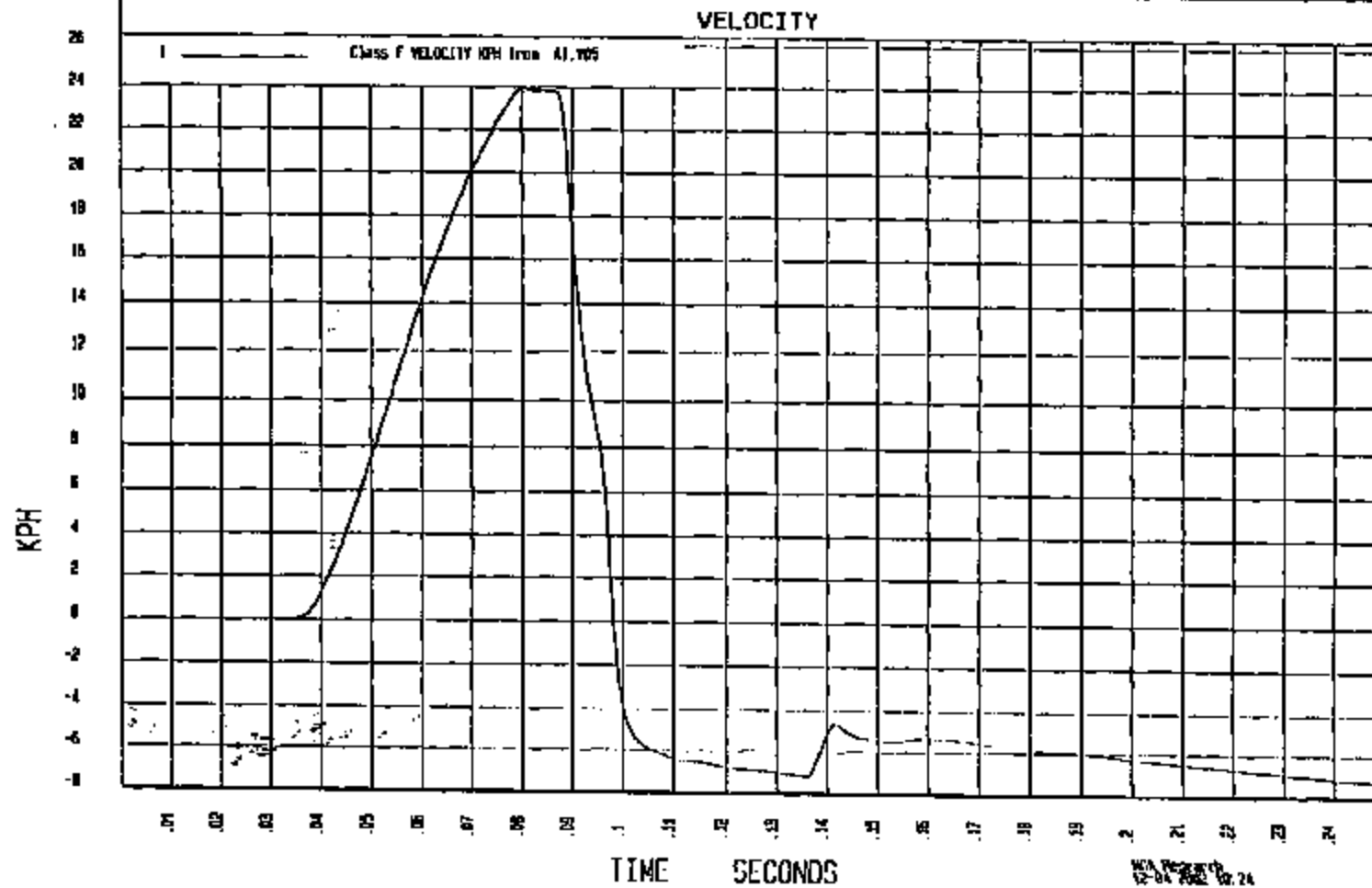


TEST: 2003 Honda Accord FMVSS 2010, G03I5-001.1, 12/4/02

COMPONENT: TEST #7 (FM2381), R/S UR3, H/V=90/50

WIDW=7.352883 MPH at 240 msec

WMAX=24.00991 KPH at 80.1 msec



MGA RESEARCH CORP
FMVSS 201U TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

CR3300 12/4/02

TEST #10 RIGHT UR4
(FMVSS4) H/V = 90/43

PRE-TEST

MCA RESEARCH CORP
FMVSS 2010 TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C-15301

12/4/02

TEST #00

RIGHT DR#

(01M2384)

HV = 90/43

POST-TEST

MCA RESEARCH CORP
FMVSS 201L TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

124/02

TEST #10
(FM2384)

RIGHT L R4
R/V = 80/43

POST-TEST

MICHIGAN OPERATIONS
DATE: 10/18/01
SUPERCEDES: MGATP201U_FRAME #2.3

DOC. NO.: MGATP201U_FRAME #2
REVISION NO.: 4
PAGE 9 of 9

SUMMARY OF FMVSS 201U TEST

JOB/NHTSA NO: C35301 VEHICLE YR/MAKE/MODEL: 2003 Honda Accord

GENERAL TEST PARAMETERS:

Test Number: 10

Target (Vehicle Side): left/right URY

Temperature: 73 °C

MGA Test Reference No.: FM2384

Humidity: 23 %

Approach Angles: Horizontal 90 °

Time of Test: 2:40 am/pm

Vertical 42 °

FMH Serial No: 35

TEST RESULTS:

HIC(d)	HIC	Δt (msec)	Velocity (kph)	Impact location on FMH (mm)	
				Above Pt. O	Left/Right Pt. O
<u>590</u>	<u>561</u>	<u>7.8</u>	<u>23.5</u>	<u>42</u>	<u>1</u>

INSTRUMENTATION INFORMATION: (all accelerometers are Endevco 7264-2000)

Axis	Channel	Serial No.	DLR Value	ΔV Pre-Test	ΔV Post-Test
<u>X</u>	<u>5</u>	<u>J35924</u>	<u>-93.1</u>	<u>1.21</u>	<u>1.21</u>
<u>Y</u>	<u>6</u>	<u>J35919</u>	<u>95.3</u>	<u>1.23</u>	<u>1.23</u>
<u>Z</u>	<u>7</u>	<u>J31051</u>	<u>95.1</u>	<u>1.51</u>	<u>1.51</u>

REMARKS (Summary of test, damage, non-compliance, invalid test, etc.):

NO USABLE DATA

Recorded By: [Signature] Approved By: [Signature] Date: 12/4/02

*Only necessary for NHTSA (Government) Compliance testing.

RESULTS OF HIC36 PROGRAM

The input file is \NHTSA\FM2384AV.A05

The HIC = 560.56 calculated over 7.8 msec

T1 = 5.68 msec T2 = 13.45 msec

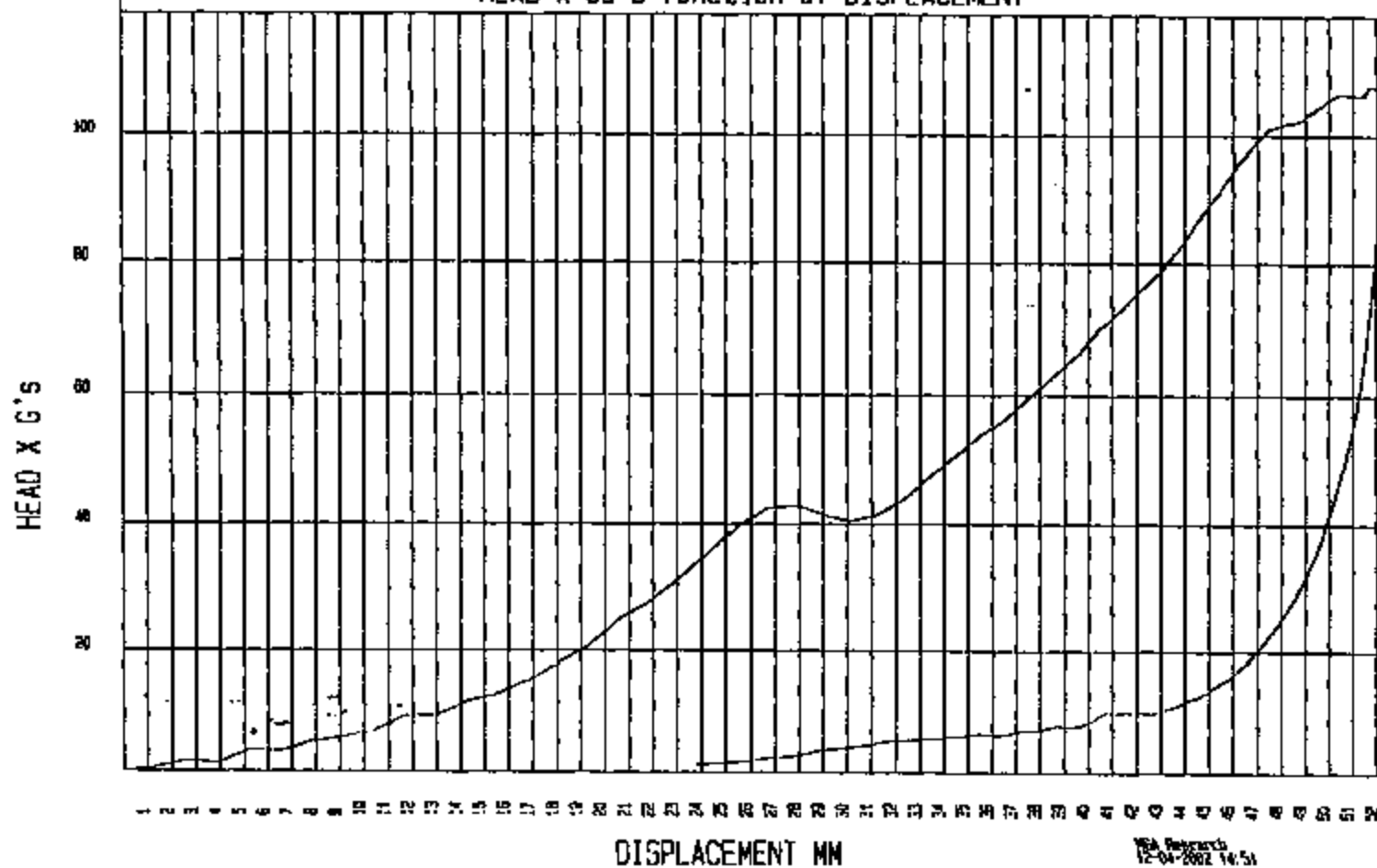
HIC(d) = 590

Impact Velocity = 23.5 (kph)

TEST: 2003 Honda Accord FMVSS 2010, G0315-001.1, 12/4/02

COMPONENT: TEST #10 (FM23B4), R/S UR4, H/V=90/43

HEAD X as a function of DISPLACEMENT



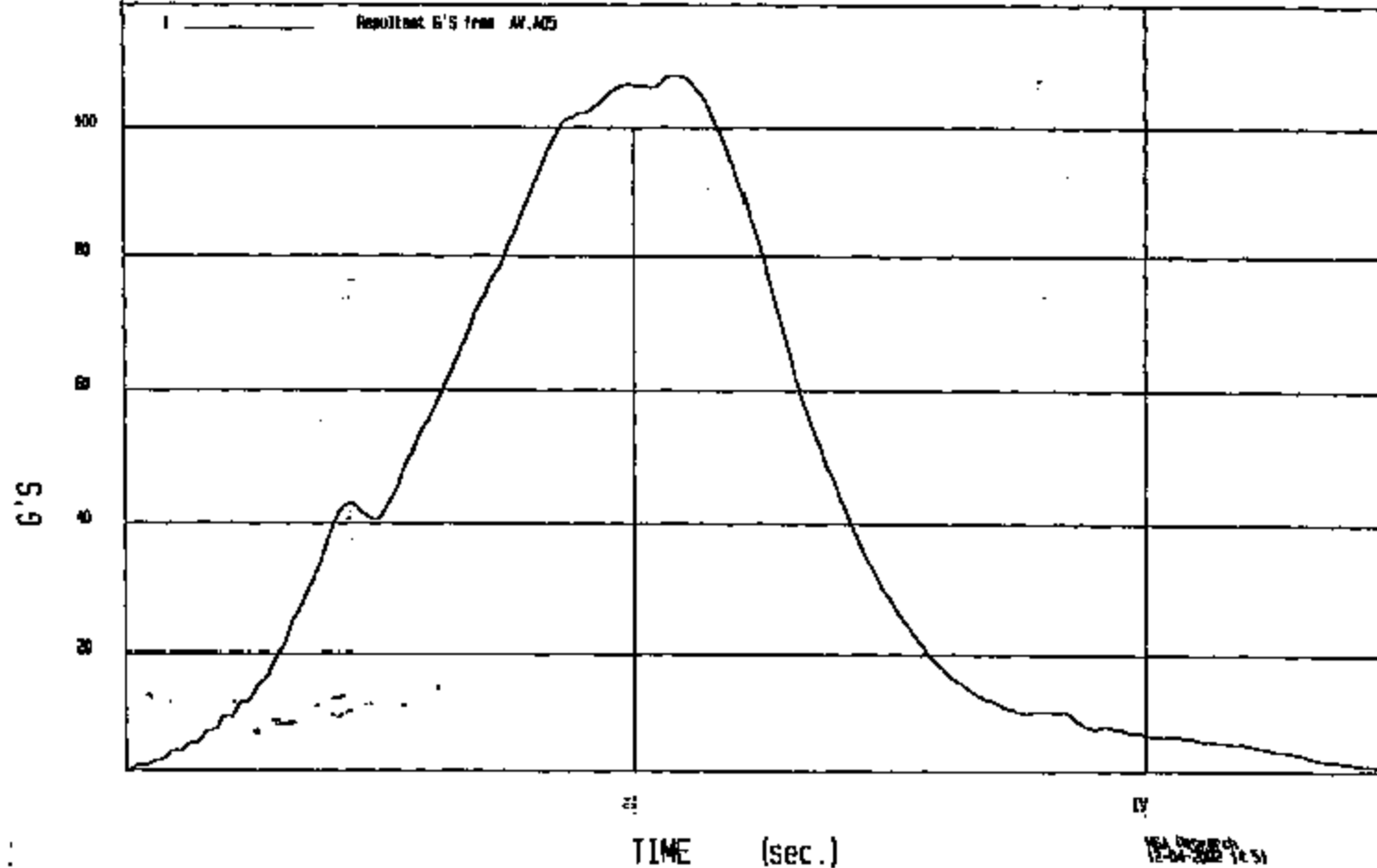
TEST: 2003 Honda Accord FMVSS 201U, GD315-001.1, 12/4/02

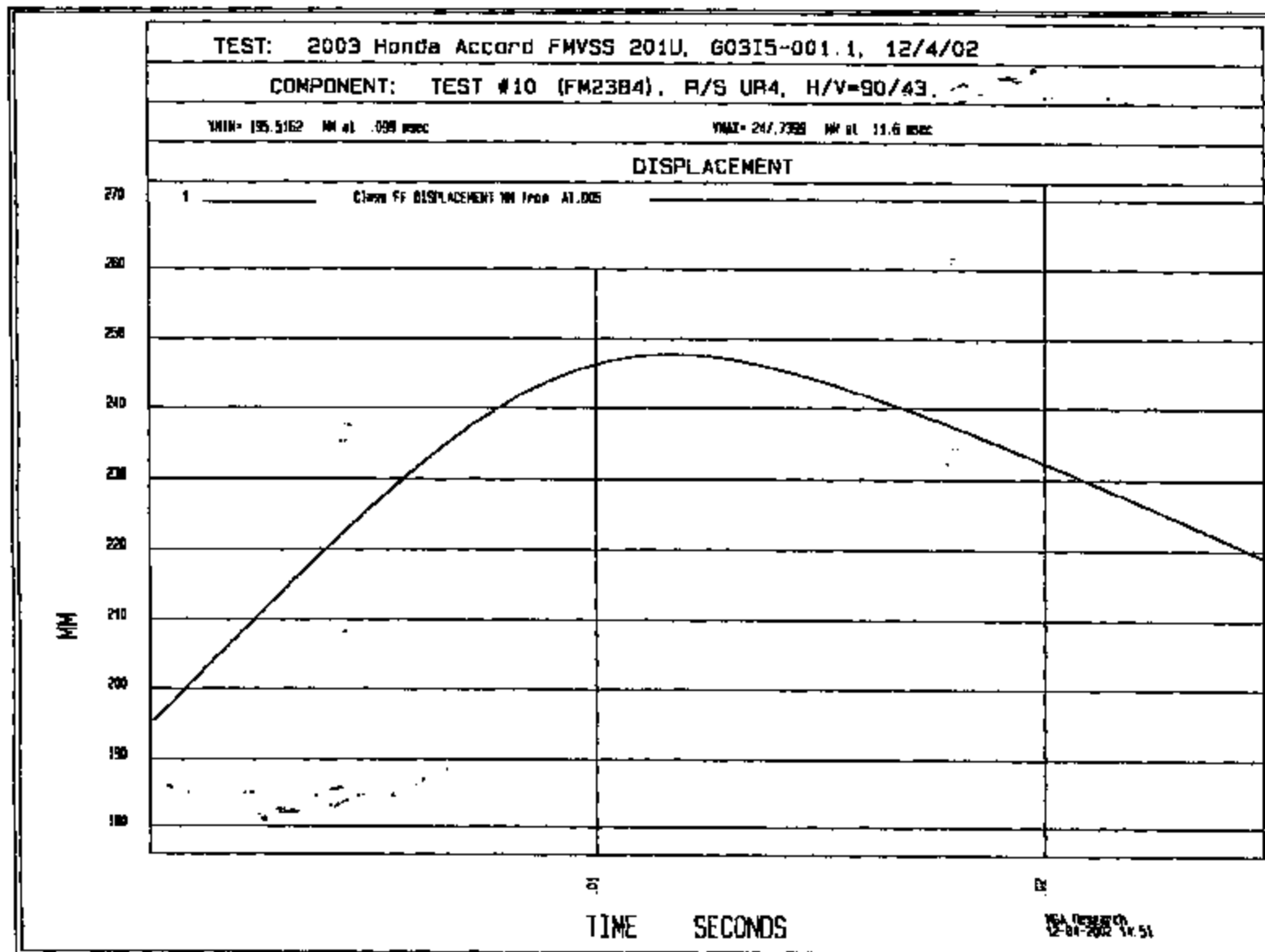
COMPONENT: TEST #10 (FM2384), R/S UR4, H/V=90/43

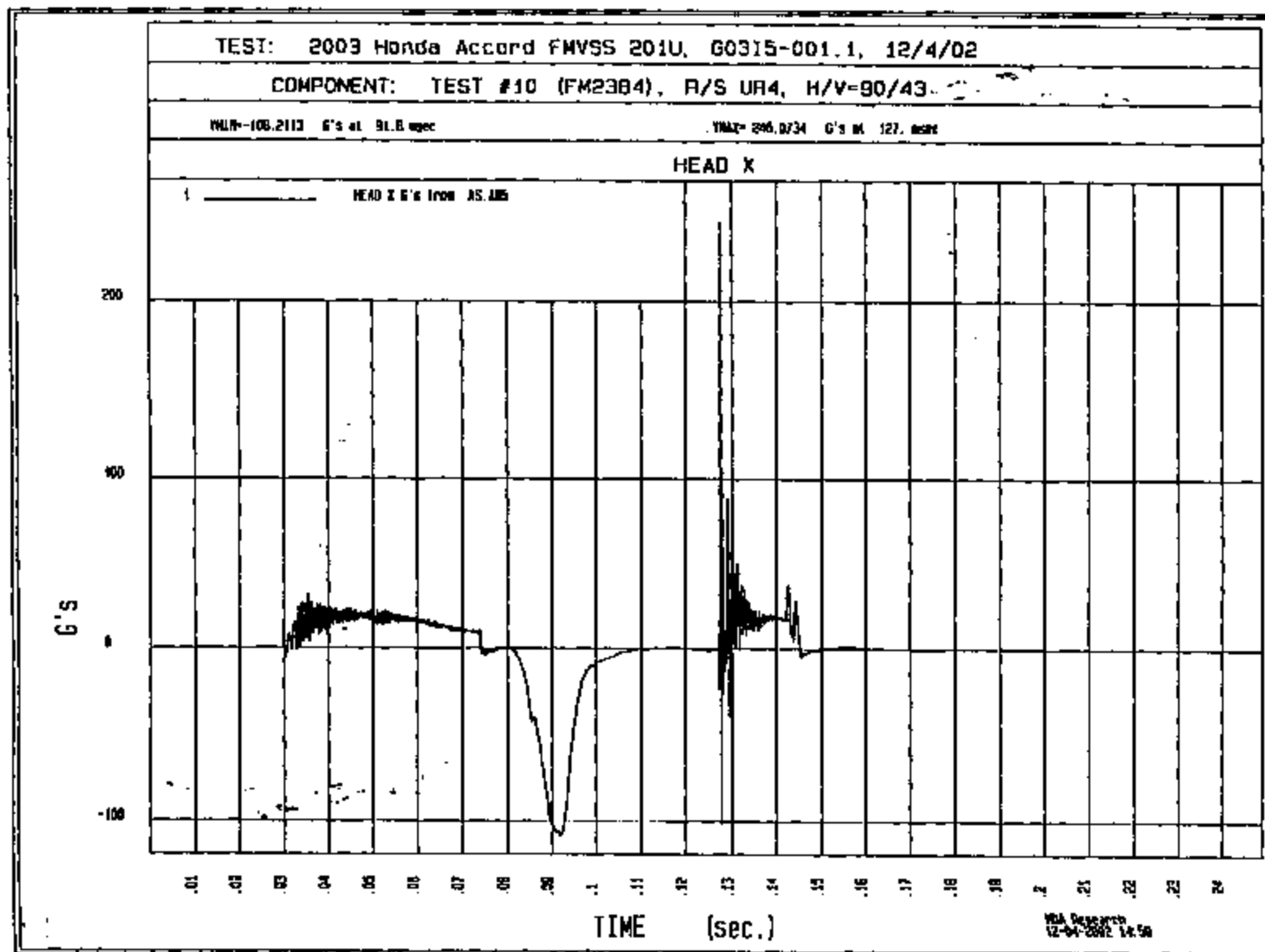
YMIN= 1.703886 G'S at 9.95 msec

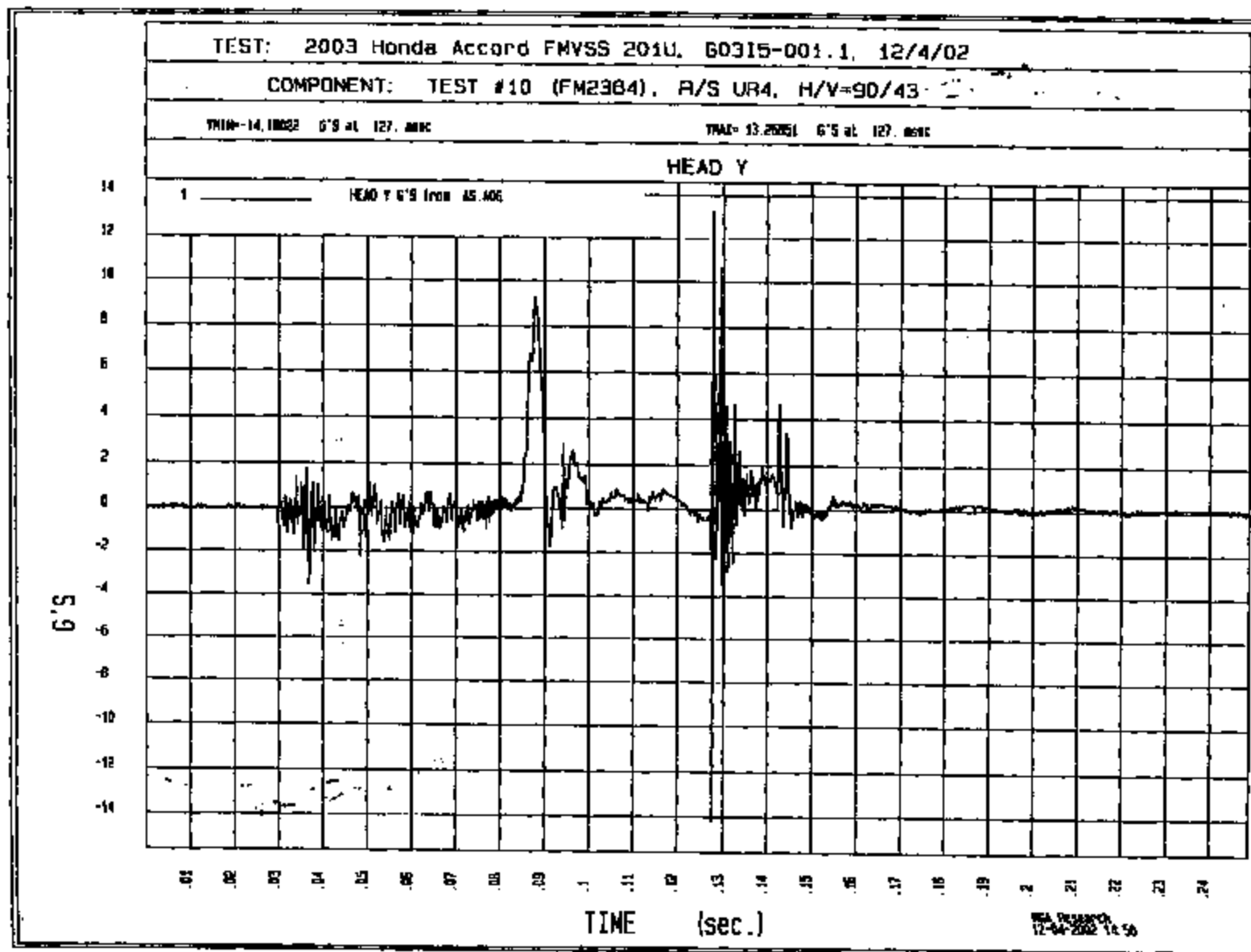
YMAX= 108.2127 G'S at 18.7 msec

FMH RESULTANT









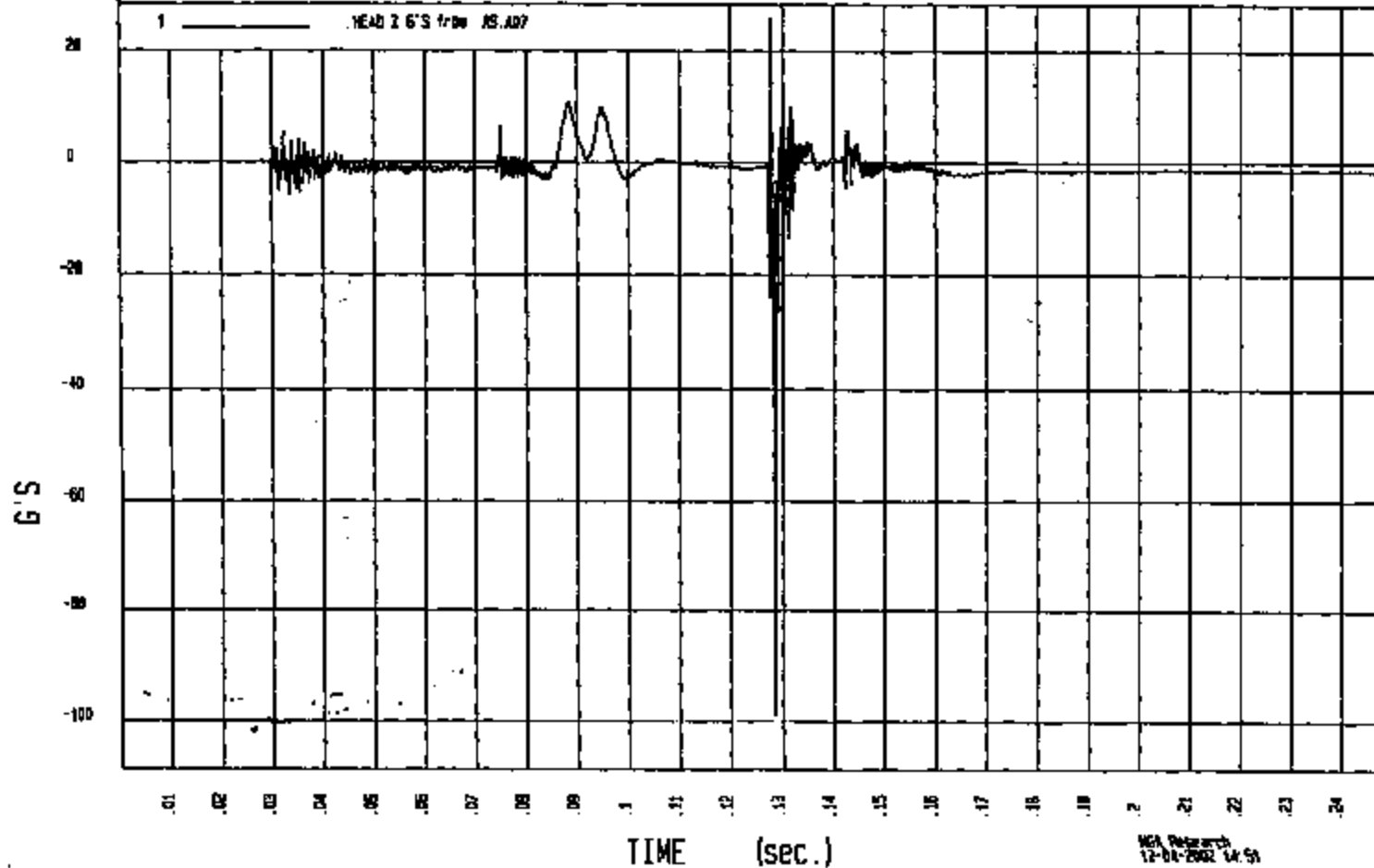
COMPONENT: TEST #10 (FM2384), R/S UR4, H/V=90/43

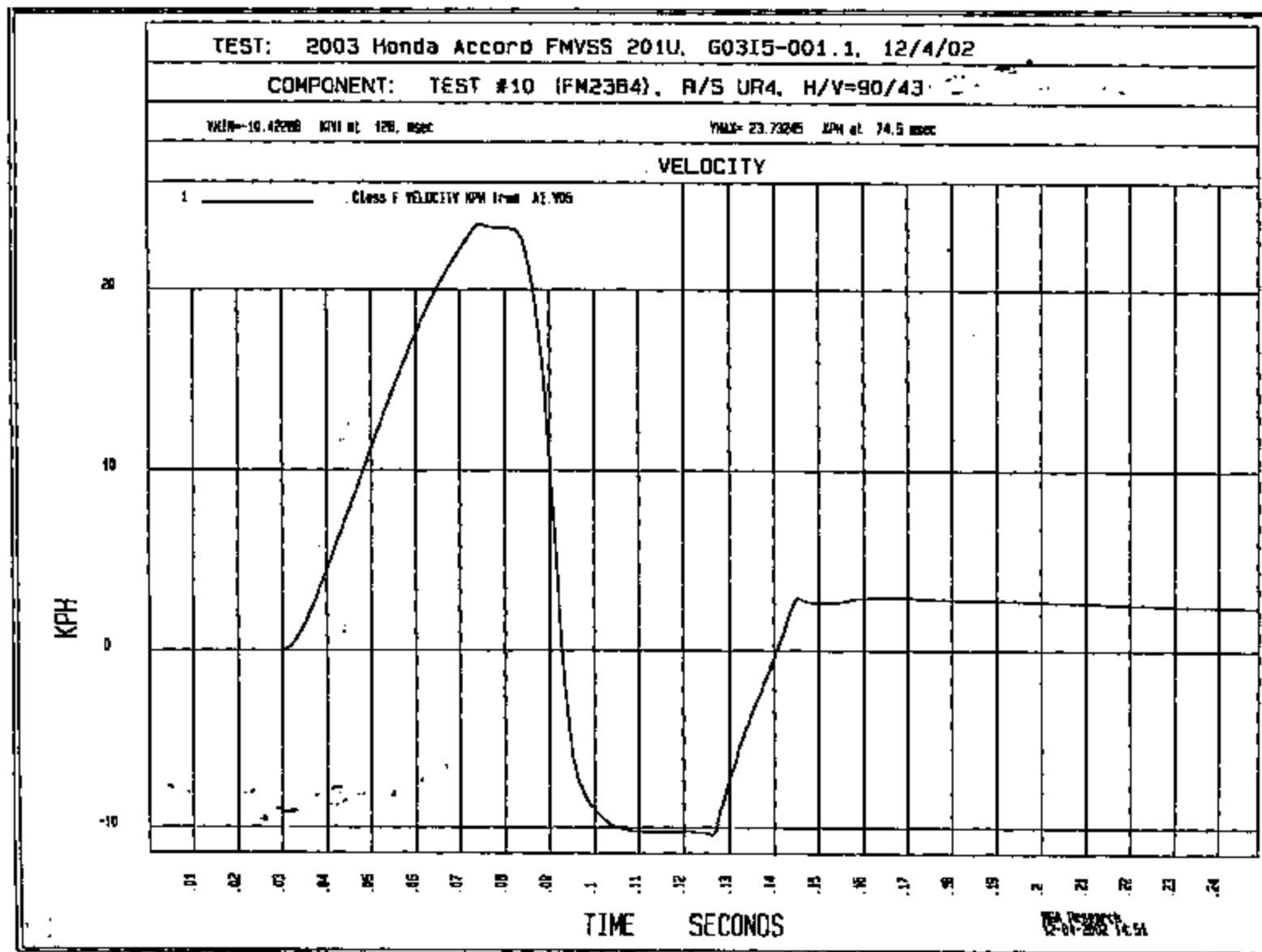
YMIN=-98.85175 G'S at 120. msec

TMX= 25.7918 G'S at 127. msec

HEAD 2

1 _____ HEAD 2 6'S fr DW READ?





MCA RESEARCH CORP
FMVSS 2011 TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

12/4/02

TEST #6
(FM2380)

RIGHT URS
RAY-180/48

PRE-TEST

MCA RESEARCH CORP
FMVSS 26.1 TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

12/4/02

TEST #6
(FM2380)

RIGHT CUR5
H/V = 130/48

POST-TEST

MCA RESEARCH CORP
FMVSS 201B TESTING
2003 HONDA ACCORD
4 DOOR SEDAN

C35301

12/4/02

TEST #6
(FM2380)

RIGHT CURS
H/V = 180/48

POST-TEST

MICHIGAN OPERATIONS
DATE: 10/18/01
SUPERCEDES: MGATP201U_FRAME #2.3

DOC. NO.: MGATP201U_FRAME #2
REVISION NO.: 4
PAGE 9 of 9

SUMMARY OF FMVSS 201U TEST

JOB/NHTSA NO: C35301 VEHICLE YR/MAKE/MODEL: 2003 HONDA ACCORD

GENERAL TEST PARAMETERS:

Test Number: 6

Target (Vehicle Side): left/right URS

Temperature: 72 °C

MGA Test Reference No.: F42382

Humidity: 22 %

Approach Angles: Horizontal 180 °

Time of Test: 9:46 (anytime)

Vertical 49 °

FMH Serial No: 38

TEST RESULTS:

HIC(d)	HIC	Δt (msec)	Velocity (kph)	Impact location on FMH (mm)	
				Above PL O	Left/Right PL O
<u>630</u>	<u>614</u>	<u>8.5</u>	<u>24.0</u>	<u>2</u>	<u>1</u>

INSTRUMENTATION INFORMATION: (all accelerometers are Endevco 7264-2000)

Axis	Channel	Serial No.	DLR Value	ΔV Pre-Test	ΔV Post-Test
<u>X</u>	<u>5</u>	<u>J36197</u>	<u>-108.2</u>	<u>1.21</u>	<u>1.21</u>
<u>Y</u>	<u>6</u>	<u>J36193</u>	<u>102.0</u>	<u>1.23</u>	<u>1.23</u>
<u>Z</u>	<u>7</u>	<u>J36353</u>	<u>97.8</u>	<u>1.51</u>	<u>1.51</u>

REMARKS (Summary of test, damage, non-compliance, invalid test, etc.):

NO VISIBLE DAMAGE

Recorded By: [Signature] Approved By: _____ Date: 12/4/02

*Only necessary for NHTSA (Government) Compliance testing.

RESULTS OF HIC36 PROGRAM

input file is \NHTSA\FM2380AV.A05

HIC = 614.41 calculated over 8.5 msec

T1 = 4.28 msec T2 = 12.75 msec

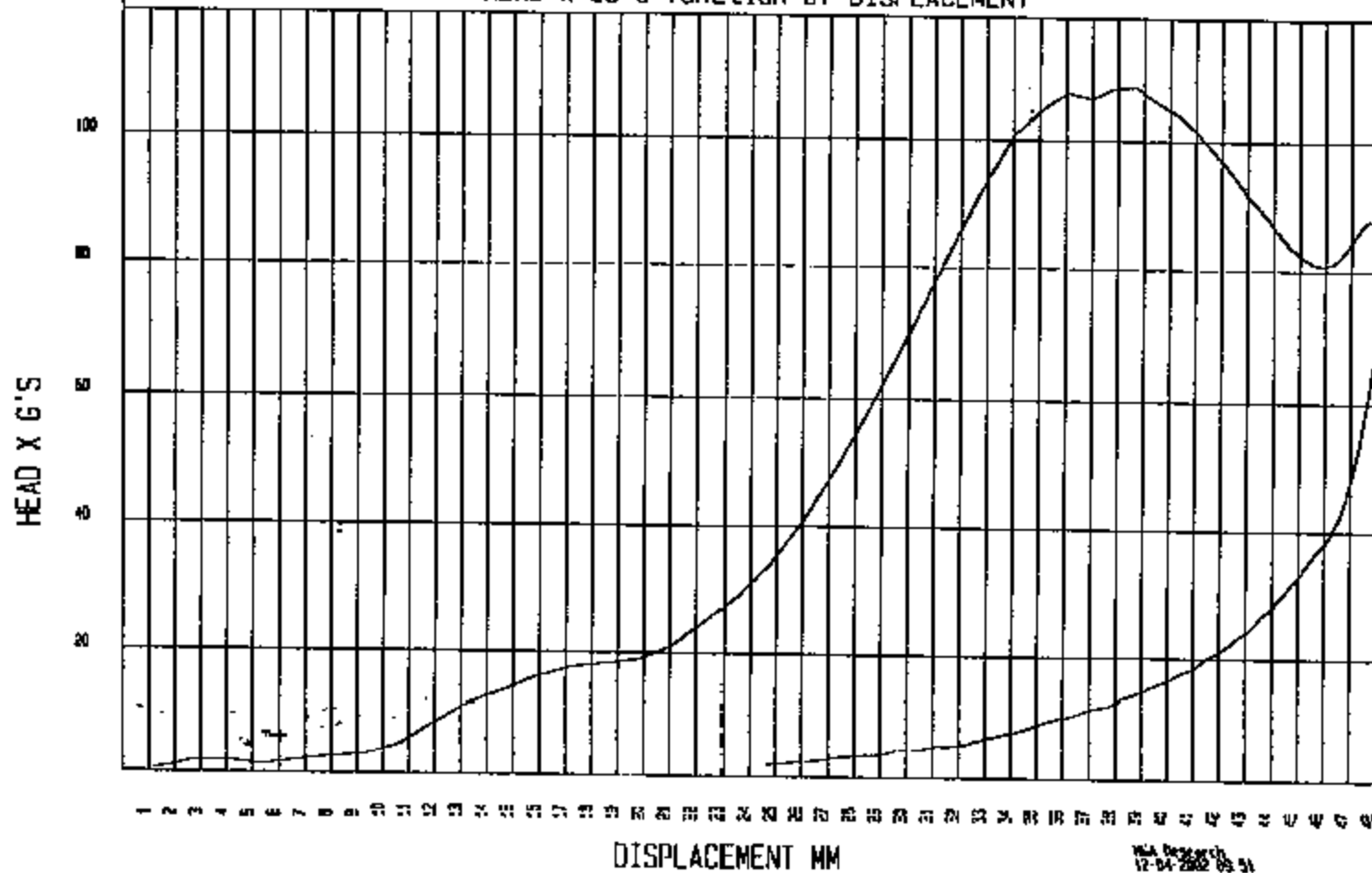
HIC(d) = 630

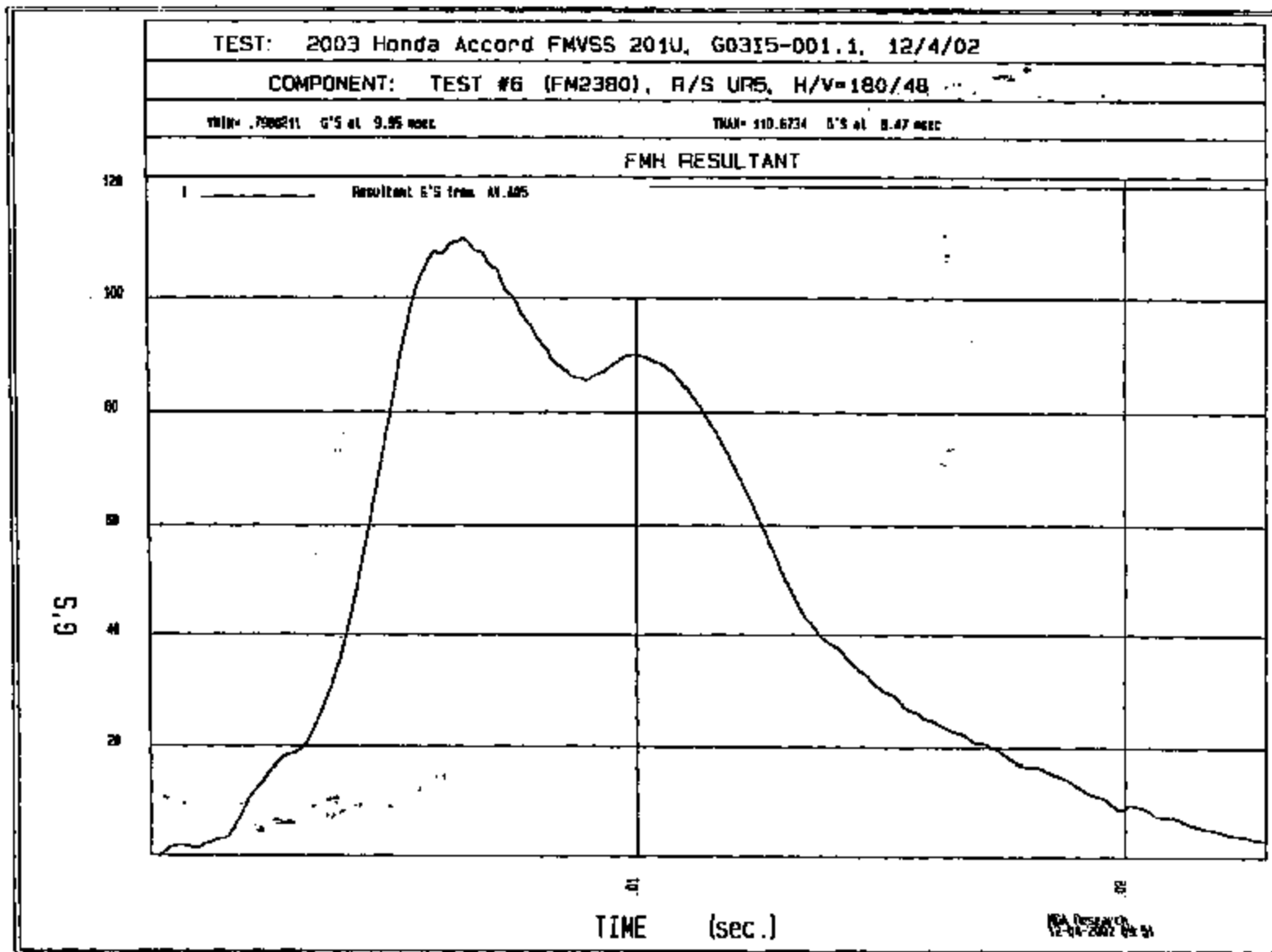
Impact Velocity = 24.0 (kph)

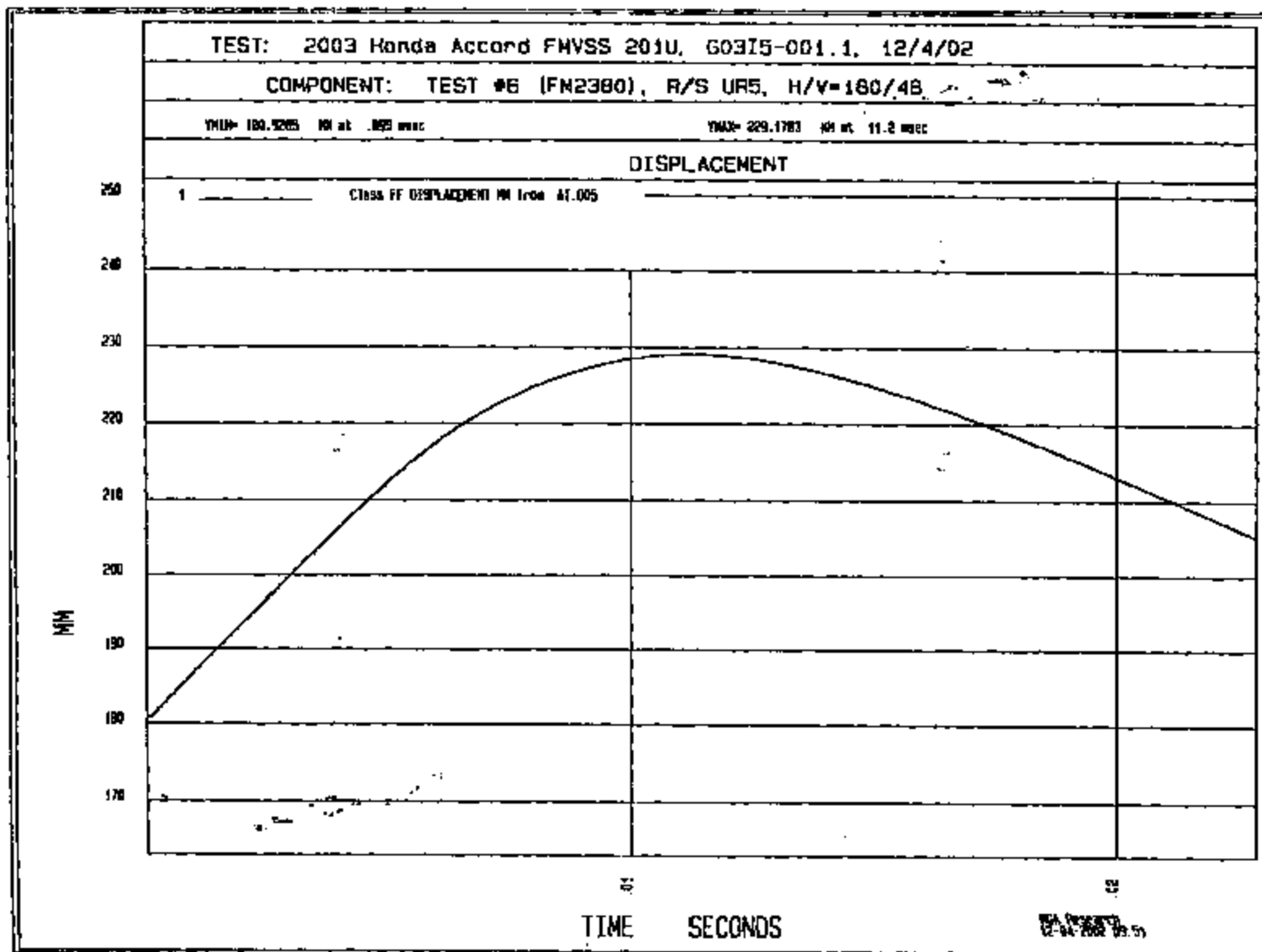
TEST: 2003 Honda Accord FMVSS 201U, G0315-001.1, 12/4/02

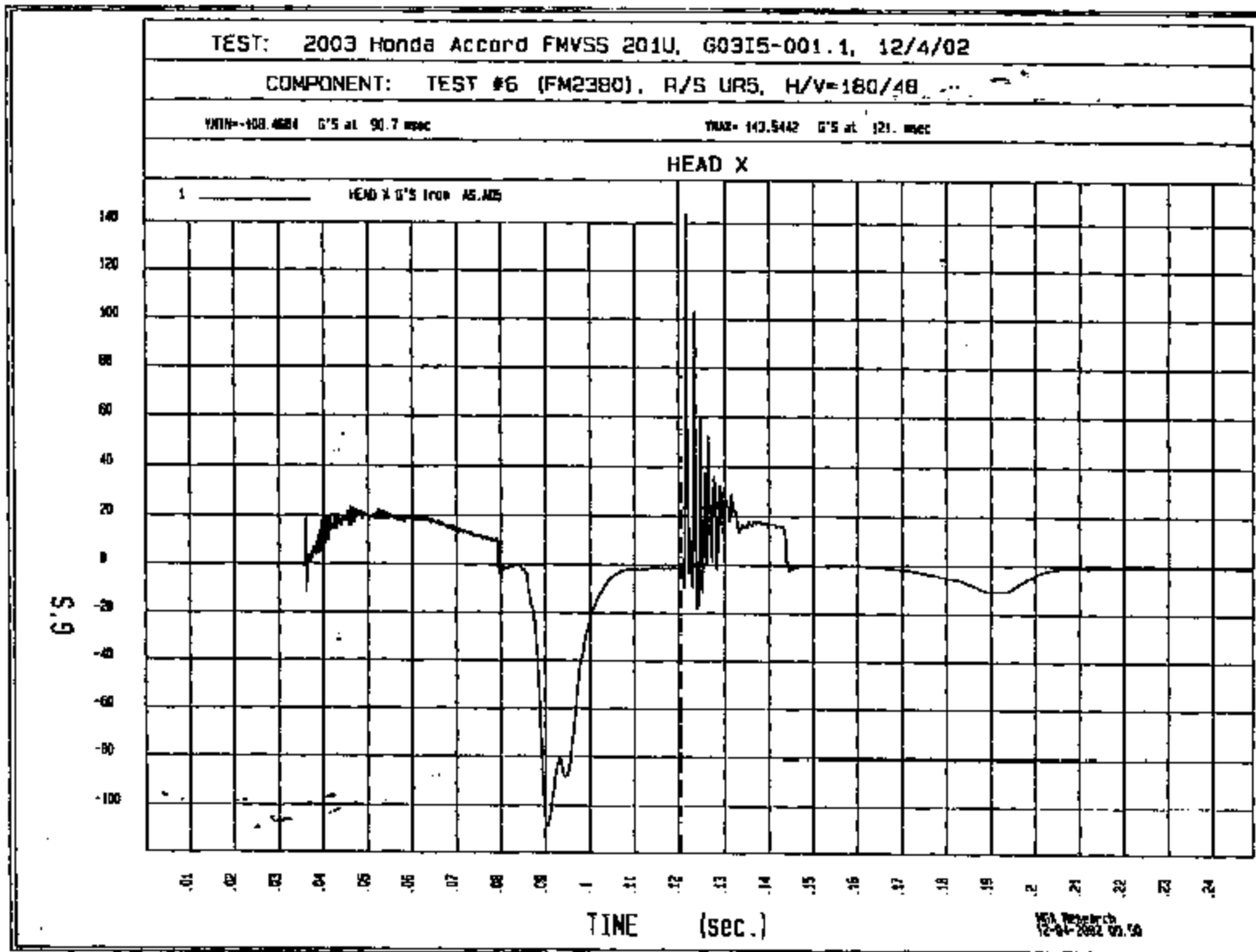
COMPONENT: TEST #6 (FM2380), R/S UR5, H/V=180/46

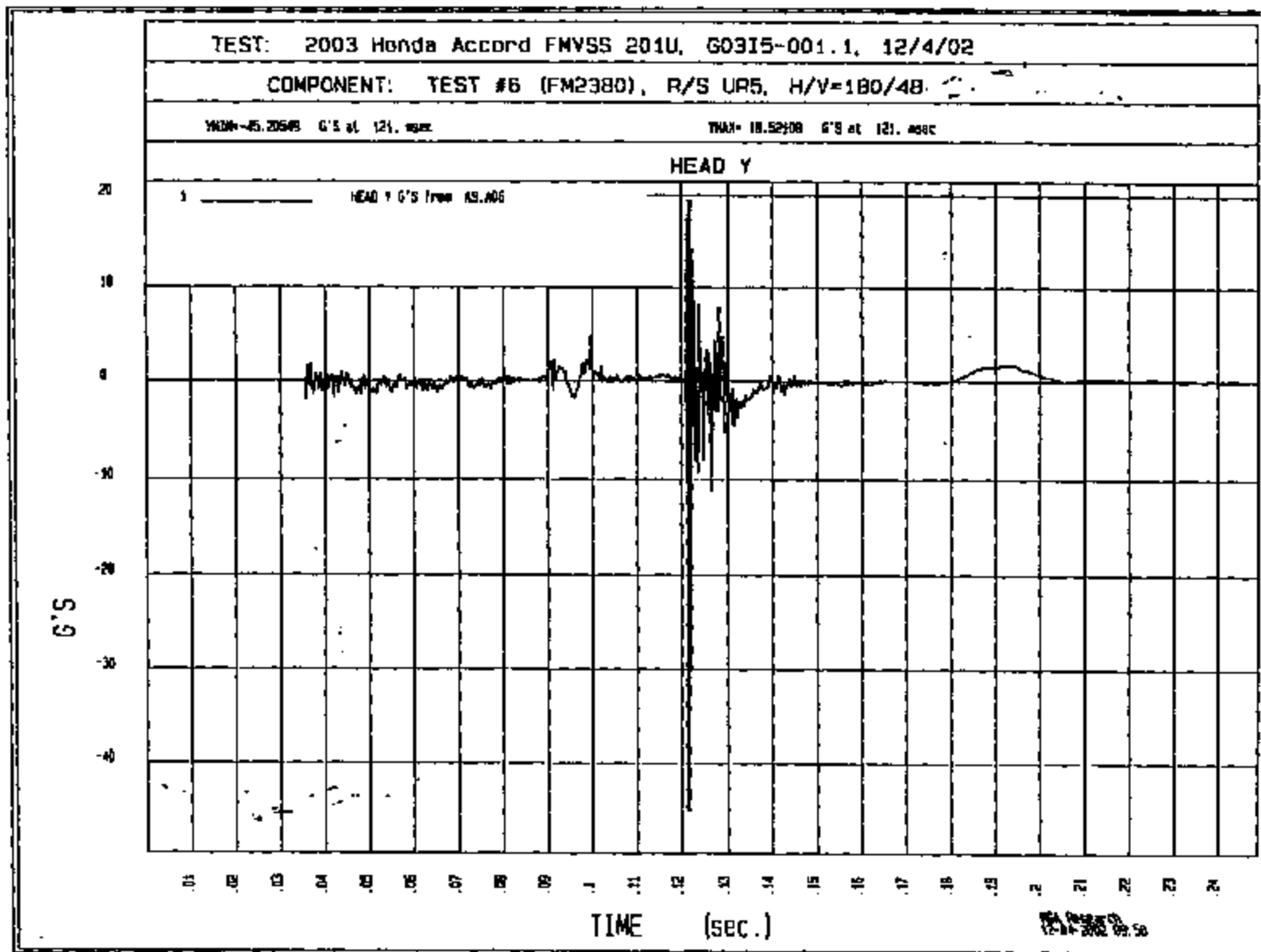
HEAD X as a function of DISPLACEMENT

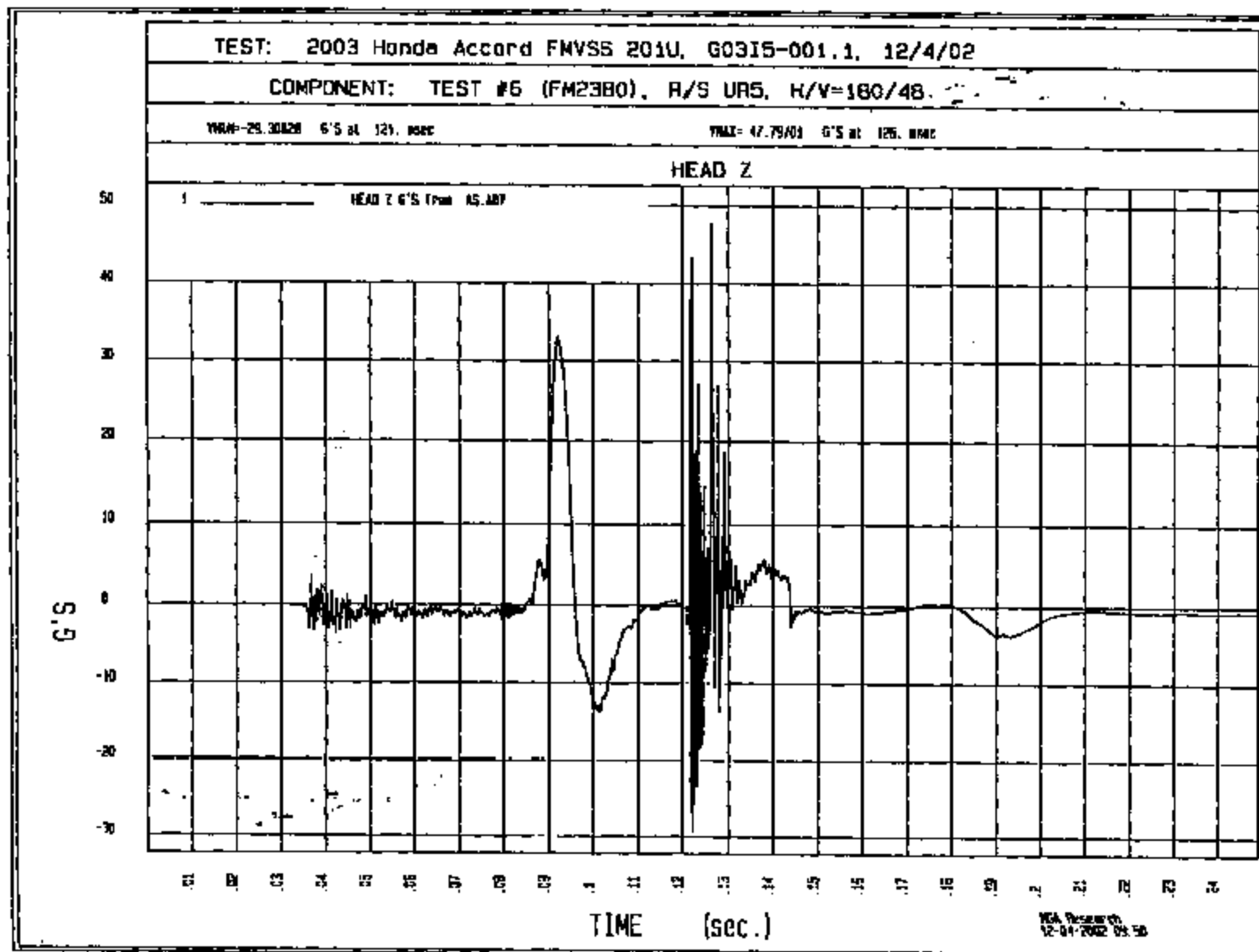


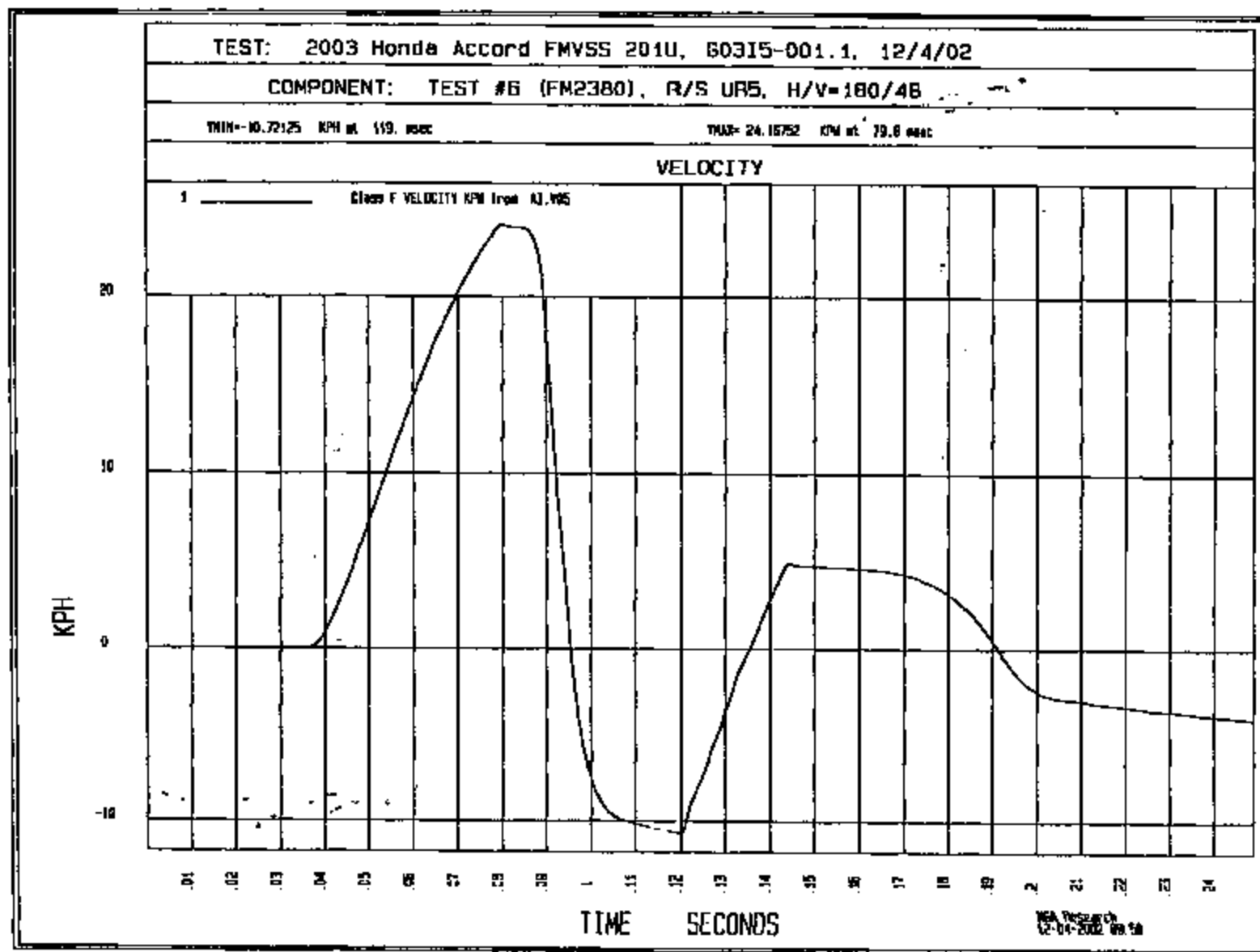












4.0 TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

The following section lists the test equipment for the compliance test series. Items marked with an asterisk are calibrated by an external lab. An additional summary table is given for the pre and post-test calibration data for the Free Motion Headforms. The temperature trace to confirm testing was conducted between 66°F and 78°F (19°C - 26°C) is included in Appendix A.

TABLE 4-1 LIST OF ITEMS USED

ITEM	MANUFACTURER NAME	MODEL #	FUNCTION OF ITEM	ACCURACY	CAL. INTERNAL
Head Drop Tower (includes test frame and DAS)	MGA Research Corp.	MGA-100-DC	FMH Calibration	N/A	N/A
Accelerometers	Endevco	7284-2000	Acceleration Data	±0.5%	6 months
*Digital Inclinometer	Mecklenburg-Duncan	PRO 380	Set Angle of FMH/Targeting	0.1°	Annual
FMVSS 201U Test Frame (includes the propulsion control system, actuator, test frame, and DAS)	MGA Research Corp.	MGA-100-FMH	Test System	N/A	N/A
Free Motion Headforms	UTAMA UTAMA UTAMA	035 036 038	Test Device	N/A	Pre and Post-Test Series
High Speed Video	Kodak	RD1000	Record Event	N/A	N/A
FARO	Faro Technologies	S08/REV 19	Targeting	0.1 mm	Annual
Measuring Devices: - Tape Measure - Plumb Bobs - Protractor	Stanley N/A Craftsman	33-215 — —	Measurement Targeting FMH setup Horizontal Measurement	1 mm N/A 0.5"	Annual
*Vehicle Scale 9804-022/9805-175	Cardinal	8950F	Weighting Vehicle	± .5 kg	Annual
* Scale	Detecto	AP-20	Weigh FMH Head	± 0.01 lb	Annual
*Temperature Recorder	Dickson	TL120	Record Temperature and Humidity	± .5°C ± 1% RH	Annual

TABLE 4-2 FMH CALIBRATION SUMMARY DATA SUMMARY TABLE

FMH Serial #		Weight (lbs)	Temp (°C)	% Humidity	Peak Resultant Acceleration (G's)	Peak Lateral Acceleration (G's)	Unimodal
Pre	#35	10.02	23.0	30.0	250.6	9.9	Yes
Post	#35	10.02	21.0	22.0	244.6	7.8	Yes
Pre	#36	10.03	23.0	30.0	258.8	3.9	Yes
Post	#36	10.03	21.0	22.0	256.0	6.2	Yes
Pre	#38	9.99	23.0	30.0	251.8	5.4	Yes
Post	#38	9.99	21.0	22.0	249.7	3.5	Yes

Calibration certificates and headform calibration information can be found in the P572L Performance Calibration report which accompanies this report.





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• 2022-2023-24 2023-24 2024-25

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MOA RESEARCH CORP
2003 HONDA ACE 100

4000H 515000

WINDUP 1120 HZ

AN DELIVERIX

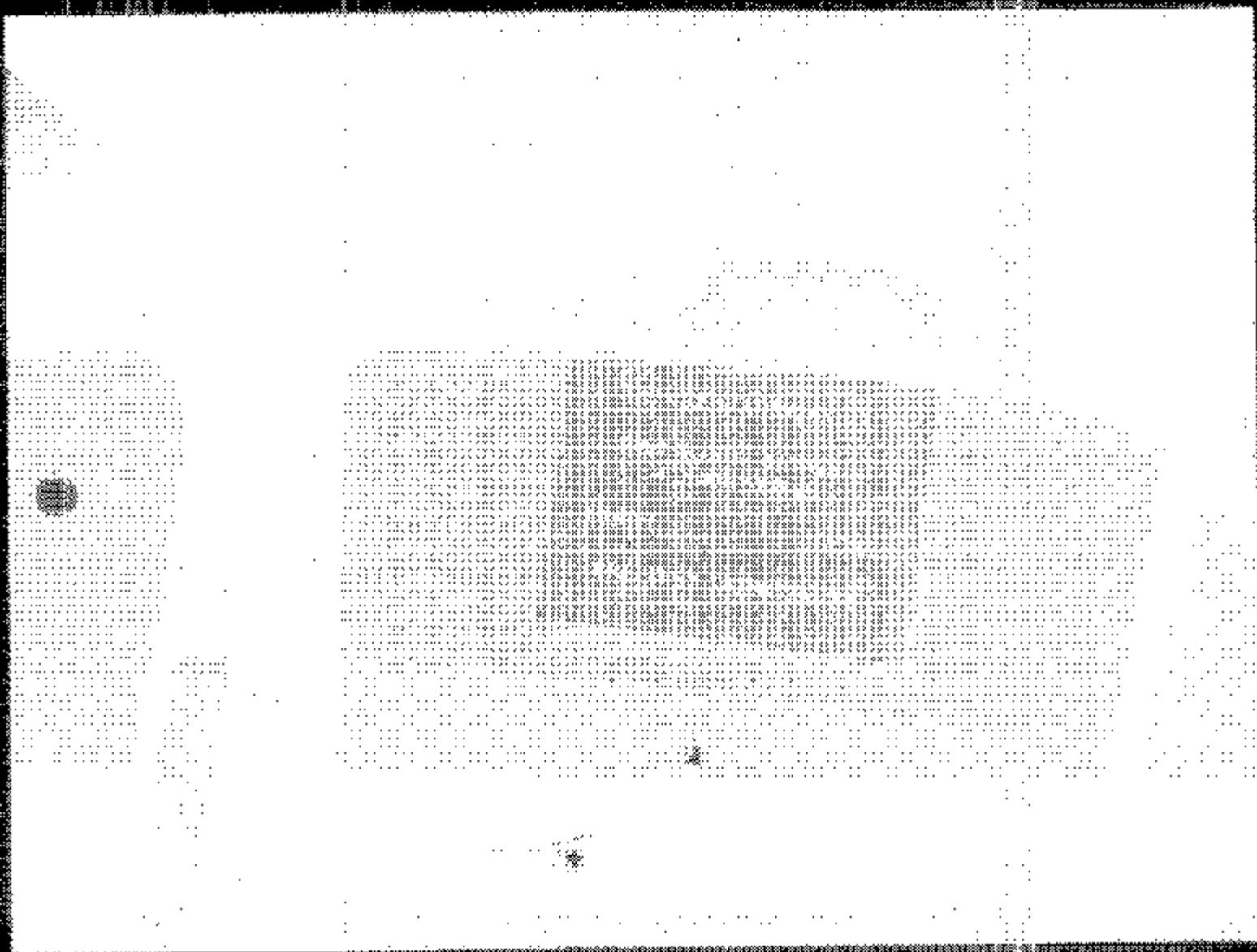
TIRE INFORMATION

VEHICLE CAPACITY WEIGHT		SEATING CAPACITY	
850 LBS (385KG)		TOTAL 5	FRONT 2 REAR 3
RECOMMENDED TIRE SIZE	COLD TIRE INFLATION PRESSURE	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION	
P205/60R16 91V	FRONT		
	REAR		
COMPACT SPARE TIRE	UP TO VEHICLE CAPACITY WEIGHT	47/230R16	
T135/60D15 100M	420KPA, 60PSI		

More Information

OFFICE OF THE ATTORNEY GENERAL
STATE OF NEW YORK
ALBANY
JANUARY 10, 1967
TO THE COMMISSIONER OF THE DEPARTMENT OF
CORRECTIONS
RE: [illegible]

100-107351



MC-210-1E-1 CORP
FARMER JOHN J. HENDON
2007 HONDA ACCORD
CROOK SEDAN
CASE# 22405
POST TEST COMPONENT

NEW HONDA ACTORD
HONDA 1980 HONDA
200 HONDA ACTORD
4 DOOR SEDAN
CISOL
12.4 #2
POST-TEST COMPONENT

MOA RESEARCH CORP
301-582-1111
2002 HONDA ACCORD
4 DOOR SEDAN
12402
POST-TEST COMPONENT

MGA RESEARCH CORP.
6 MYNSTER LANE
2003 BOND & COLLEGE
4 DOOR SEDAN

C35391

POST-TEST COPY

C35301 TEMPERATURE TRACE 12/2-5/02

